

UNITED STATES DISTRICT OF COURT
NORTHERN DISTRICT OF ILLINOIS
WESTERN DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

v.

WINNEBAGO RECLAMATION SERVICE,
INC., et al.

Defendants.

CIVIL ACTION NO. 92-C-20346

ORDER

Upon consideration of the Motion of the United States For Entry of Consent Decree and any response thereto, IT IS HEREBY ORDERED that the Motion is GRANTED and the Consent Decree is hereby APPROVED and ENTERED.

Dated:

Philip G. Rasmussen
United States District Judge

A TRUE COPY-ATTEST
H. STUART CUNNINGHAM, CLERK
By Cristal Banks
DEPUTY CLERK
U. S. DISTRICT COURT, NORTHERN
DISTRICT OF ILLINOIS
DATE: February 12, 1993

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
WESTERN DIVISION

UNITED STATES OF AMERICA

Plaintiff,

v.

Winnebago Reclamation Service,
Inc., et al
Defendants.

CIVIL ACTION NO.

92C20346

CONSENT DECREE

A TRUE COPY-ATTEST
H. STUART CURNINGHAM, CLERK
By Crystal Banker
DEPUTY CLERK
U. S. DISTRICT COURT, NORTHERN
DISTRICT OF ILLINOIS
DATE: February 12, 1993

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TABLE OF CONTENTS

CERCLA RD/RA CONSENT DECREE

I.	<u>BACKGROUND</u>	1
II.	<u>JURISDICTION</u>	5
III.	<u>PARTIES BOUND</u>	5
IV.	<u>DEFINITIONS</u>	6
V.	<u>GENERAL PROVISIONS</u>	11
VI.	<u>PERFORMANCE OF THE WORK BY CLASS A SETTLING DEFENDANT</u>	14
VII.	<u>ADDITIONAL RESPONSE ACTIONS</u>	21
VIII.	<u>EPA PERIODIC REVIEW</u>	23
IX.	<u>QUALITY ASSURANCE, SAMPLING, and DATA ANALYSIS</u>	24
X.	<u>ACCESS AND DEED RESTRICTIONS</u>	27
XI.	<u>REPORTING REQUIREMENTS</u>	31
XII.	<u>SUBMISSIONS REQUIRING AGENCY APPROVAL</u>	34
XIII.	<u>PROJECT COORDINATORS</u>	37
XIV.	<u>ASSURANCE OF ABILITY TO COMPLETE WORK</u>	38
XV.	<u>CERTIFICATION OF COMPLETION</u>	41
XVI.	<u>EMERGENCY RESPONSE</u>	44
XVII.	<u>REIMBURSEMENT OF RESPONSE COSTS AND PAYMENTS BY CLASS B SETTLING DEFENDANTS</u>	45
XVIII.	<u>INDEMNIFICATION AND INSURANCE</u>	51
XIX.	<u>FORCE MAJEURE</u>	53
XX.	<u>DISPUTE RESOLUTION</u>	56
XXI.	<u>STIPULATED PENALTIES</u>	61
XXII.	<u>COVENANTS NOT TO SUE BY PLAINTIFFS</u>	65

XXIII.	<u>COVENANTS BY SETTLING DEFENDANTS</u>	72
XXIV.	<u>EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION</u>	73
XXV.	<u>ACCESS TO INFORMATION</u>	75
XXVI.	<u>RETENTION OF RECORDS</u>	77
XXVII.	<u>NOTICES AND SUBMISSIONS</u>	78
XXVIII.	<u>EFFECTIVE DATE</u>	80
XXIX.	<u>RETENTION OF JURISDICTION</u>	80
XXX.	<u>APPENDICES</u>	81
XXXI.	<u>COMMUNITY RELATIONS</u>	81
XXXII.	<u>MODIFICATION</u>	82
XXXIII.	<u>LODGING AND OPPORTUNITY FOR PUBLIC COMMENT</u>	83
XXXIV.	<u>SIGNATORIES/SERVICE</u>	83

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6 IN THE UNITED STATES DISTRICT COURT
7 FOR THE NORTHERN DISTRICT OF ILLINOIS
8 WESTERN DIVISION
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10 UNITED STATES OF AMERICA)
11)
12)

13 Plaintiff,)
14)

15 v.)
16)

17 Winnebago Reclamation Service,)
18 Inc., et al)
19 Defendants.)
20)
21)
22)
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27)

CIVIL ACTION NO.

28 CONSENT DECREE
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30 I. BACKGROUND
31

32 A. The United States of America ("United States"), on behalf
33 of the Administrator of the United States Environmental Protection
34 Agency ("EPA"), filed a complaint in this matter pursuant to
35 Sections 106 and 107 of the Comprehensive Environmental Response,
36 Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9606,
37 9607.

38 B. The United States in its complaint seeks, inter alia:
39 (1) reimbursement of costs incurred by EPA and the Department of
40 Justice for response actions at the Pagel's Pit Superfund Site in
41 Winnebago County, Illinois, together with accrued interest; and (2)
performance of studies and response work by the Defendants at the

1 Site consistent with the National Contingency Plan, 40 C.F.R. Part
2 300 (as amended) ("NCP").

3 C. In accordance with the NCP and Section 121(f)(1)(F) of
4 CERCLA, 42 U.S.C. § 9621(f)(1)(F), EPA notified the State of
5 Illinois (the "State") in November, 1991 of negotiations with
6 potentially responsible parties regarding the implementation of the
7 remedial design and remedial action for the Site, and EPA has
8 provided the State with an opportunity to participate in such
negotiations and be a party to this Consent Decree.

9 D. In accordance with Section 122(j)(1) of CERCLA, 42 U.S.C.
10 § 9622(j)(1), EPA notified relevant Federal natural resource
11 trustees on November 12, 1991 of negotiations with potentially
12 responsible parties regarding the release of hazardous substances
13 that may have resulted in injury to the natural resources under
14 Federal trusteeship and encouraged the trustee to participate in
15 the negotiation of this Consent Decree.

16 E. The Defendants that have entered into this Consent Decree
17 ("Class A and Class B Settling Defendants") do not admit any
18 liability to the Plaintiff arising out of the transactions or
19 occurrences alleged in the complaint.

20 F. Pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA
21 placed the Site on the National Priorities List, set forth at 40
22 C.F.R. Part 300, Appendix B, by publication in the Federal Register
23 on June 10, 1986, 51 Fed. Reg. 21054;

24 G. In response to a release or a substantial threat of a
25 release of hazardous substances at or from the Site, Winnebago
26

Reclamation Service, Inc., the City of Rockford, the Sanitary District of Rockford, and Quality Metal Finishing Company commenced on August 27, 1986, a Remedial Investigation and Feasibility Study ("RI/FS") for the Site pursuant to 40 C.F.R. § 300.430;

H. The parties listed in Paragraph G completed a Remedial Investigation ("RI") Report in March 1991 and issued a Feasibility Study ("FS") Report in March 1991 that addresses most of the Site but which provides that the groundwater contamination in the vicinity of the southeast portion of the Site will be considered as an area separate from the Site requiring further study;

I. Pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617, EPA published notice of the availability of the FS report, the proposed plan for remedial action, and other site-related documents (including the RI report) on April 14, 1991, in a major local newspaper of general circulation. This proposed plan recommended a strategy for remedial action at most of the Site but did not propose a remedial strategy for the groundwater contamination in the Site's southeast corner. EPA provided an opportunity for written and oral comments from the public on the proposed plan for remedial action. A copy of the transcript of the public meeting is available to the public as part of the administrative record upon which the Regional Administrator based the selection of the response action.

J. The decision by EPA on the remedial action to be implemented at the Site is embodied in a Record of Decision ("ROD"), executed on June 28, 1991, upon which the State had a

reasonable opportunity to review and comment. The ROD sets forth the remedial action to be implemented at most of the Site but does not set forth the remedial action to be implemented for the groundwater contamination in the vicinity of the Site's southeast corner. The ROD includes a responsiveness summary to the public comments. Notice of the final plan was published in accordance with Section 117(b) of CERCLA.

K. Based on the information presently available to EPA, EPA believes that the Work will be properly and promptly conducted by the Class A Settling Defendant if conducted in accordance with the requirements of this Consent Decree and its appendices.

L. Solely for the purposes of Section 113(j) of CERCLA, the Remedial Action selected by the ROD and the Work to be performed by the Class A Settling Defendant shall constitute a response action taken or ordered by the President.

M. The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and implementation of this Consent Decree will expedite the cleanup of most of the Site and will avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest. The Parties recognize, and the Court by entering this Consent Decree finds, as to Class A and Class B Settling Defendants, that this Consent Decree does not consider nor address the groundwater contamination in the Site's southeast corner and

that entry of this Decree is without prejudice to any Party's rights pertaining thereto.

NOW, THEREFORE, it is hereby Ordered, Adjudged, and Decreed:

II. JURISDICTION

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. §§ 9606, 9607, and 9613(b). This Court also has personal jurisdiction over the Class A and Class B Settling Defendants. Solely for the purposes of this Consent Decree and the underlying complaint, Class A and Class B Settling Defendants waive all objections and defenses that they may have to jurisdiction of the Court or to venue in this District. Class A and Class B Settling Defendants shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree.

III. PARTIES BOUND

2. This Consent Decree applies to and is binding upon the United States and upon Class A and Class B Settling Defendants and their successors and assigns. Any change in ownership or corporate status of a Settling Defendant including, but not limited to, any transfer of assets or real or personal property shall in no way alter such Settling Defendant's responsibilities under this Consent Decree.

3. Class A Settling Defendant shall provide a copy of this Consent Decree to each contractor hired to perform the Work (as

defined below) required by this Consent Decree and to each person representing the Class A Settling Defendant with respect to the Site or the Work and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Consent Decree. Class A Settling Defendant or its contractors shall provide written notice of the Consent Decree to all subcontractors hired to perform any portion of the Work required by this Consent Decree. Class A Settling Defendant shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work contemplated herein in accordance with this Consent Decree. With regard to the activities undertaken pursuant to this Consent Decree, each contractor and subcontractor shall be deemed to be in a contractual relationship with the Class A Settling Defendant within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

IV. DEFINITIONS

4. Unless otherwise expressly provided herein, terms used in this Consent Decree which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Consent Decree or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C.

§§ 9601 et seq.

"Class A Settling Defendant" shall mean the party identified in Appendix E (Class A Settling Defendant).

"Class B Settling Defendants" shall mean those parties identified in Appendix G and, pursuant to the Regional Administrator's determination, found to be de minimis parties under Section 122(g) of CERCLA, 42 U.S.C. Section 9622(g).

"Consent Decree" shall mean this Decree and all appendices attached hereto (listed in Section XXX). In the event of conflict between this Decree and any appendix, this Decree shall control.

"Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

"EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"Hazardous Substance" shall have the meaning stated in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

"IEPA" shall mean the Illinois Environmental Protection Agency and any successor departments or agencies of the State.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Consent Decree, verifying the Work, or otherwise

implementing, overseeing, or enforcing this Consent Decree, including, but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Sections VII, VIII, X (including, but not limited to, attorneys fees and the amount of just compensation), XVI, and Paragraph 82 of Section XXII. Future Response Costs shall also include all costs, including direct and indirect costs, paid by the United States in connection with the Site between September 30, 1991 and the effective date of this Consent Decree and all interest on the Past Response Costs from November 12, 1991 to the date of payment of the Past Response Costs.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, including, but not limited to, any amendments thereto.

"Operation and Maintenance" or "O & M" shall mean all activities required to maintain the effectiveness of the Remedial Action as required under the Operation and Maintenance Plan approved or developed by EPA pursuant to this Consent Decree and the Statement of Work (SOW).

"Owner Settling Defendant" shall mean the Settling Defendant listed in Appendix D.

"Paragraph" shall mean a portion of this Consent Decree identified by an arabic numeral or an upper case letter.

"Parties" shall mean the United States and the Class A and Class B Settling Defendants.

"Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs and interest, that the United States incurred and paid with regard to the Site prior to September 30, 1991.

"Performance Standards" shall mean those cleanup standards, standards of control, and other substantive requirements, criteria or limitations set forth in the ROD or Section II of the SOW.

"Plaintiff" shall mean the United States.

"RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901 et seq. (also known as the Resource Conservation and Recovery Act).

"Record of Decision" or "ROD" shall mean the EPA Record of Decision relating to the Pagel's Pit Landfill Site signed on June 28, 1991 by the Regional Administrator, EPA Region V, and all attachments thereto, which is attached hereto as Appendix A.

"Remedial Action" shall mean those activities, except for Operation and Maintenance, to be undertaken by the Class A Settling Defendant to implement the final plans and specifications submitted by the Class A Settling Defendant pursuant to the Remedial Design Work Plan(s) and approved by EPA.

"Remedial Action Work Plan" shall mean a document submitted by the Class A Settling Defendant pursuant to Paragraph 12.a of this Consent Decree and described more fully in Paragraph 12.b.

"Remedial Design" shall mean those activities to be undertaken by the Class A Settling Defendant to develop the final plans and specifications for the Remedial Action pursuant to the Remedial Design Work Plan(s).

"Remedial Design Work Plan" shall mean a document submitted by the Class A Settling Defendant pursuant to Paragraph 11.a of this Consent Decree and described more fully in Paragraph 11.b.

"Section" shall mean a portion of this Consent Decree identified by a roman numeral.

"Site" shall mean the Pagel's Pit Landfill Superfund site, encompassing approximately 90 acres, located on Lindenwood Road, south of Baxter Road (also known as the Winnebago Reclamation Landfill) in Winnebago County, Illinois and depicted generally on the map attached as Appendix C.

"State" shall mean the State of Illinois.

"Statement of Work" or "SOW" shall mean the statement of work for implementation of the Remedial Design, Remedial Action, and Operation and Maintenance at the Site, as set forth in Appendix B to this Consent Decree and any modifications made in accordance with this Consent Decree.

"Supervising Contractor" shall mean the principal contractor(s) or supervising personnel retained or employed by the Class A Settling Defendant to supervise and direct the implementation of the Work or any major component of the Work under this Consent Decree.

"United States" shall mean the United States of America.

"Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33), 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (4) any "hazardous substance" under the Illinois Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111 1/2, pars. 1001 et. seq.).

"Work" shall mean all activities Class A Settling Defendant is required to perform under this Consent Decree, except those required by Section XXVI (Retention of Records).

V. GENERAL PROVISIONS

5. Objectives of the Parties

The objectives of the Parties in entering into this Consent Decree are to protect public health or welfare or the environment at the Site by the design and implementation of response actions at the Site and to reimburse response costs of the Plaintiff.

6. Commitments by Class A Settling Defendant

Class A Settling Defendant shall finance and perform the Work in accordance with this Consent Decree and all plans, standards, specifications, and schedules set forth in or developed and approved by EPA pursuant to this Consent Decree. Class A Settling Defendant shall also reimburse the United States for Past Response Costs and Future Response Costs as provided in this Consent Decree.

7. Compliance With Applicable Law

All activities undertaken by Class A Settling Defendant pursuant to this Consent Decree shall be performed in accordance with the requirements of all applicable federal and state laws and regulations. Class A Settling Defendant must also comply with all applicable or relevant and appropriate requirements of all Federal and state environmental laws as set forth in the ROD and the SOW. The activities conducted pursuant to this Consent Decree, if approved by EPA, shall be considered to be consistent with the NCP.

8. Permits

a. As provided in Section 121(e) of CERCLA and §300.5 of the NCP, no permit shall be required for any portion of the Work conducted entirely on-site. Where any portion of the Work requires a federal or state permit or approval, Class A Settling Defendant shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

b. The Class A Settling Defendant may seek relief under the provisions of Section XIX (Force Majeure) of this Consent Decree for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit required for the Work.

c. This Consent Decree is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

9. Notice of Obligations to Successors-in-Title

a. Within 15 days after the entry of this Consent Decree, the Owner Settling Defendant shall record a notice of this Consent Decree, in a form approved by EPA, with the Recorder of Deeds Office, Winnebago County, State of Illinois. Thereafter, each deed, title, or other instrument conveying an interest in the property included in the Site shall contain a notice stating that the property is subject to this Consent Decree and shall reference the recorded location of the Consent Decree and any restrictions applicable to the property under this Consent Decree.

b. The obligations of the Owner Settling Defendant with respect to the provision of access and deed restrictions under Section X (Access and Deed Restrictions) and the implementation of institutional controls under Appendix B (Statement of Work) shall be binding upon the Class A Settling Defendant and any and all persons who subsequently acquire any such interest or portion thereof (hereinafter "Successors-in-Title"). Within 15 days after the entry of this Consent Decree, the Owner Settling Defendant shall record at the Recorder of Deeds Office a notice of obligation to provide access and notice of deed restrictions under Section X (Access and Deed Restrictions) and related covenants. Each subsequent instrument conveying an interest to any such property included in the Site shall reference the recorded location of such notice and covenants applicable to the property.

c. The Owner Settling Defendant and any Successor-in-Title shall, at least 30 days prior to the conveyance of any such

interest, give written notice of this Consent Decree to the grantee and written notice to EPA of the proposed conveyance, including the name and address of the grantee, and the date on which notice of the Consent Decree was given to the grantee. In the event of any such conveyance, the Class A Settling Defendant's obligations under this Consent Decree, including its obligations to provide or secure access and comply with the deed restrictions pursuant to Section X, shall continue to be met by the Class A Settling Defendant. Any deed, title, or other instrument of conveyance regarding such property shall contain a notice that the property is subject to this Consent Decree setting forth the style of the case, the case number, and the court having jurisdiction. In addition, if the United States approves, the grantee may perform some or all of the Work under this Consent Decree. In no event shall the conveyance of an interest in property that includes, or is a portion of, the Site release or otherwise affect the liability of the Class A Settling Defendant to comply with the Consent Decree.

VI. PERFORMANCE OF THE WORK BY CLASS A SETTLING DEFENDANT

10. Selection of Supervising Contractor.

a. Each aspect of the Work to be performed by Class A Settling Defendant pursuant to Sections VI (Performance of the Work by Class A Settling Defendant), VII (Additional Response Actions), VIII (EPA Periodic Review), and IX (Quality Assurance, Sampling and Data Analysis) of this Consent Decree shall be under the direction and supervision of a Supervising Contractor, the selection of which

shall be subject to disapproval by EPA. Within 10 days after the lodging of this Consent Decree, Class A Settling Defendant shall notify EPA in writing of the name, title, and qualifications of any contractor proposed to be a Supervising Contractor. EPA will issue a notice of disapproval or an authorization to proceed. If at any time thereafter, Class A Settling Defendant proposes to change or add a Supervising Contractor, Class A Settling Defendant shall give such notice to EPA and must obtain an authorization to proceed from EPA before the new Supervising Contractor performs, directs, or supervises any Work under this Consent Decree.

b. If EPA disapproves a proposed Supervising Contractor, EPA will notify Class A Settling Defendant in writing. Class A Settling Defendant shall submit to EPA a list of contractors, including the qualifications of each contractor, that would be acceptable to them within 30 days of receipt of EPA's disapproval of the contractor previously proposed. EPA will provide written notice of the names of any contractor(s) that it disapproves and an authorization to proceed with respect to any of the other contractors. Class A Settling Defendant may select any contractor from that list that is not disapproved and shall notify EPA of the name of the contractor selected within 21 days of EPA's authorization to proceed.

c. If EPA fails to provide written notice of its authorization to proceed or disapproval as provided in this Paragraph and this failure prevents the Class A Settling Defendant from meeting one or more deadlines in a plan approved by the EPA

pursuant to this Consent Decree, Class A Settling Defendant may seek relief under the provisions of Section XIX (Force Majeure) hereof.

11. Remedial Design.

a. Within 60 days after EPA's issuance of an authorization to proceed pursuant to Paragraph 10, Class A Settling Defendant shall submit to EPA and the State a Remedial Design/Remedial Action Work Plan (RD/RA Work Plan) that shall describe how all components of the remedial action will be designed and constructed. In addition, Class A Settling Defendant shall submit to EPA and the State Remedial Design Work Plans for the design of the various components of the Remedial Action at the Site. The RD/RA Work Plan and the Remedial Design Work Plans shall provide for the designs of the remedies set forth in the ROD in accordance with the SOW and, upon their approval by EPA, shall be incorporated into and become enforceable under this Consent Decree. Within 60 days after EPA's issuance of authorizations to proceed, the Class A Settling Defendant shall submit to EPA and the State Health and Safety Plans for field design activities which conform to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120.

b. The Remedial Design Work Plans shall include plans and schedules for implementation of all remedial design and pre-design tasks identified in the SOW for the component being designed, including, but not limited to, the following plans and schedules for the completion of: site access and permitting plan; quality

1 assurance project plan; sampling plan; pre-design studies plan;
2 preliminary design package; intermediate design package (if
3 required); prefinal design package (if required); and final design;
4 operations and maintenance plan; construction quality assurance
5 plan. The Remedial Design Work Plans shall also include schedules
6 for completion of the Remedial Action Work Plans.

7 c. Upon approval of a Remedial Design Work Plan by EPA, after
8 a reasonable opportunity for review and comment by the State, and
9 submittal of the Health and Safety Plan for all field design
10 activities to EPA and the State, Class A Settling Defendant shall
11 implement the Remedial Design Work Plan. The Class A Settling
12 Defendant shall submit to EPA and the State all plans, submittals
13 and other deliverables required under the approved Remedial Design
14 Work Plan in accordance with the approved schedule for review and
15 approval pursuant to Section XII (Submissions Requiring Agency
16 Approval). Unless otherwise authorized by EPA, Class A Settling
17 Defendant shall not commence further Remedial Design activities at
18 the Site prior to approval of the Remedial Design Work Plan.

19 d. The preliminary design submittal shall include, at a
20 minimum, the following: (1) design criteria; (2) results of
21 treatability studies; (3) results of additional field sampling and
22 pre-design work; (4) project delivery strategy; (5) preliminary
23 plans, drawings and sketches; (6) required specifications in
24 outline form; and (7) preliminary construction schedule.

25 e. The intermediate design submittal, if required by EPA or
if independently submitted by the Class A Settling Defendant, shall

1 be a continuation and expansion of the preliminary design. Any
2 value engineering proposals must be identified and evaluated during
3 this review.

4 f. The pre-final/final design submittal shall include, at a
5 minimum, where applicable, the following: (1) final plans and
6 specifications; (2) Operation and Maintenance Plan; (3)
7 Construction Quality Assurance Plan; (4) Field Sampling Plan
8 (directed at measuring progress towards meeting Performance
9 Standards); and (5) Contingency Plan.

10 12. Remedial Action.

11 a. As part of the final design submittal for the Remedial
12 Action or element(s) of the Remedial Action, Class A Settling
13 Defendant shall submit to EPA and the State a work plan for the
14 performance of the Remedial Action or element(s) of the Remedial
15 Action at the Site ("Remedial Action Work Plan"). A Remedial
16 Action Work Plan shall provide for construction of the remedy or
17 element(s) of the remedy, in accordance with the SOW, as set forth
18 in the design plans and specifications in the final design
19 submittal. Any Remedial Action Work Plan for an element or
20 elements of the Remedial Action shall be clearly designated as
21 such. Upon its approval by EPA, any such Remedial Action Work Plan
22 shall be incorporated into and become enforceable under this
23 Consent Decree. At the same time as it submits a Remedial Action
24 Work Plan, Class A Settling Defendant shall submit to EPA and the
25 State a Health and Safety Plan for field activities required by the
26 Remedial Action Work Plan which conforms to the applicable ,

Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120.

b. A Remedial Action Work Plan shall include the following:

(1) the schedule for completion of the Remedial Action; (2) method for selection of the contractor; (3) methodology for implementation of the Construction Quality Assurance Plan; (4) a groundwater monitoring plan, when applicable and when it has not already been submitted; (5) methods for satisfying permitting requirements; (6) methodology for implementation of the Operation and Maintenance Plan; and (7) procedures and plans for the decontamination of equipment and the disposal of contaminated materials. A Remedial Action Work Plan also shall include a schedule for implementation of all Remedial Action tasks identified in the final design submittal and shall identify the personnel comprising the Class A Settling Defendant's Remedial Action Project Team (including, but not limited to, the Supervising Contractor).

c. Upon approval of a Remedial Action Work Plan by EPA, after a reasonable opportunity for review and comment by the State, Class A Settling Defendant shall implement the activities required under the Remedial Action Work Plan. The Class A Settling Defendant shall submit to EPA and the State all plans, submittals, or other deliverables required under the approved Remedial Action Work Plan in accordance with the approved schedule for review and approval pursuant to Section XII (Submissions Requiring Agency Approval). Unless otherwise authorized by EPA, Class A Settling Defendant shall not commence physical on-site activities (except for normal

business activities of the owner/operator) at the Site prior to approval of the Remedial Action Work Plan.

13. The Work performed by the Class A Settling Defendant pursuant to this Consent Decree shall include the obligation to achieve the Performance Standards.

14. Class A Settling Defendant acknowledges and agrees that nothing in this Consent Decree, the SOW, or the Remedial Design or Remedial Action Work Plans constitutes a warranty or representation of any kind by Plaintiff that compliance with the work requirements set forth in the SOW and the Work Plans will achieve the Performance Standards. Class A Settling Defendant's compliance with the work requirements shall not foreclose Plaintiff from seeking compliance with all terms and conditions of this Consent Decree, including, but not limited to, the applicable Performance Standards.

15. Class A Settling Defendant shall, prior to any off-Site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator of such shipment of Waste Material. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

a. The Class A Settling Defendant shall include in the written notification the following information, where available:

(1) the name and location of the facility to which the Waste

Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. The Class A Settling Defendant shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

b. The identity of the receiving facility and state will be determined by the Class A Settling Defendant following the award of the contract for Remedial Action construction. The Class A Settling Defendant shall provide the information required by Paragraph 15.a as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

VII. ADDITIONAL RESPONSE ACTIONS

16. In the event that EPA determines or the Class A Settling Defendant proposes that additional response actions are necessary to meet the Performance Standards or to carry out the remedy selected in the ROD, notification of such additional response actions shall be provided to the Project Coordinator for the other party.

17. In the event that EPA or the Class A Settling Defendant proposes that additional response actions are necessary to meet the Performance Standards or to carry out the remedy selected in the ROD, written notification of such additional response actions shall

1 be provided to the Project Coordinator for the other party. EPA
2 shall review any proposal by the Class A Settling Defendant to
3 determine whether any additional response action is necessary.
4 After an opportunity for review and comment by the State on any
5 proposal and by the Class A Settling Defendant on a proposal by
6 EPA, EPA shall determine, under the requirements of CERCLA and the
7 NCP, what additional response action is necessary and appropriate
8 unless Sections 113(k) or 117 of CERCLA or the NCP require public
9 comment before that determination. If public comment is required,
10 EPA will select any additional response action that it determines
11 to be necessary and appropriate to meet the Performance Standards
12 or to carry out the remedy selected in the ROD after the comment
13 period has ended. Notice of the selection shall be served on the
Class A Settling Defendant and the State.

15 18. Within 30 days of receipt of notice from EPA that
16 additional response actions are necessary, Class A Settling
17 Defendant shall submit to EPA and the State for EPA approval, after
18 reasonable opportunity for review and comment by the State, a work
19 plan for the additional response action. The plan shall conform to
20 the applicable requirements of Paragraphs 11 and 12. Upon approval
21 of the plan pursuant to Section XII (Submissions Requiring Agency
22 Approval), Class A Settling Defendant shall implement the plan for
23 additional response actions in accordance with the schedule
24 contained therein.

25 19. Class A Settling Defendant may invoke the procedures set
26 forth in Section XX (Dispute Resolution) to dispute EPA's

determination that additional response actions are necessary to meet the Performance Standards or to carry out the remedy selected in the ROD. Such a dispute shall be resolved pursuant to Paragraphs 61-64 of this Consent Decree.

VIII. EPA PERIODIC REVIEW

20. Class A Settling Defendant shall conduct any studies and investigations as requested by EPA, in accordance with CERCLA and the NCP, in order to permit EPA to conduct reviews at least every five years as required by Section 121(c) of CERCLA and any applicable regulations. Copies of the studies and any reports, proposals, documents or items required by EPA shall be submitted by the Settling Defendant(s) to EPA for approval under Section XII and to the State for review and comment.

21. The Class A Settling Defendant and the State shall be provided with at least a (30) day period to review and comment on any EPA proposed further response action under Section 121(c). If required by Sections 113(k)(2) or 117 of CERCLA, the public also will be provided with an opportunity to comment on any further response actions proposed by EPA as a result of the review conducted pursuant to Section 121(c) of CERCLA and to submit written comments for the record during the public comment period. After the period for submission of written comments is closed, the Regional Administrator, EPA Region V, or his/her delegate will determine in writing whether further response actions are appropriate.

22. If the Regional Administrator, EPA Region V, or his/her delegate determines that information received, in whole or in part, during the review conducted pursuant to Section 121(c) of CERCLA, indicates that the Remedial Action is not protective of human health and the environment, the Class A Settling Defendant shall undertake any further response actions EPA has determined are appropriate, unless its liability for such further response actions is barred by the Covenant Not to Sue set forth in Section XXII. Class A Settling Defendant shall submit a plan for such work to EPA for approval in accordance with the procedures set forth in Section VI (Performance of the Work by Class A Settling Defendant) and shall implement the plan approved by EPA. The Class A Settling Defendant may invoke the procedures set forth in Section XX (Dispute Resolution) to dispute (1) EPA's determination that the remedial action is not protective of human health and the environment, (2) EPA's selection of the further response actions ordered as arbitrary and capricious or otherwise not in accordance with law, or (3) EPA's determination that the Class A Settling Defendant's liability for the further response actions requested is reserved in Paragraphs 78, 79, or 81 or otherwise not barred by the Covenant Not to Sue set forth in Section XXII.

IX. QUALITY ASSURANCE, SAMPLING, and DATA ANALYSIS

23. Class A Settling Defendant shall use quality assurance, quality control, and chain of custody procedures for all design, compliance and monitoring samples in accordance with EPA's "Interim

Guidelines and Specifications For Preparing Quality Assurance Project Plans," December 1980, (QAMS-005/80); "Data Quality Objective Guidance," (EPA/540/G87/003 and 004); "EPA NEIC Policies and Procedures Manual," May 1978, revised November 1984, (EPA 330/9-78-001-R); and subsequent amendments to such guidelines upon notification by EPA to Class A Settling Defendant of such amendment. Amended guidelines shall apply only to procedures conducted after such notification. Prior to the commencement of any monitoring project under this Consent Decree, Class A Settling Defendant shall submit to EPA for approval, after a reasonable opportunity for review and comment by the State, a Quality Assurance Project Plan ("QAPP") to EPA and the State that is consistent with the SOW, the NCP and "Interim Guidelines and Specifications For Preparing Quality Assurance Project Plans," December 1980, (QAMS-005/80). If relevant to the proceeding, the Parties agree that validated sampling data generated in accordance with the QAPP(s) and reviewed and approved by EPA shall be admissible as evidence, without objection, in any proceeding under this Decree. Class A Settling Defendant shall ensure that EPA personnel and its authorized representatives are allowed access at reasonable times to all laboratories utilized by Class A Settling Defendant in implementing this Consent Decree. In addition, Class A Settling Defendant shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring. Class A Settling Defendant shall ensure that the laboratories it utilizes for the analysis of

1 samples taken pursuant to this Decree perform all analyses
2 according to accepted EPA methods. Accepted EPA methods consist of
3 those methods which are documented in the "Contract Lab Program
4 Statement of Work for Inorganic Analysis" and the "Contract Lab
5 Program Statement of Work for Organic Analysis," dated February
6 1988, as revised, and any amendments made thereto during the course
7 of the implementation of this Decree. Class A Settling Defendant
8 shall ensure that all laboratories it uses for analysis of samples
9 taken pursuant to this Consent Decree participate in an EPA or EPA-
10 equivalent QA/QC program.

11 24. Upon request, the Class A Settling Defendant shall allow
12 split or duplicate samples to be taken by EPA or its authorized
13 representatives. Class A Settling Defendant shall notify EPA not
14 less than 14 days in advance of any sample collection activity
15 unless shorter notice is agreed to by EPA. In addition, EPA shall
16 have the right to take any additional samples that EPA deems
17 necessary. Upon request, EPA shall allow the Class A Settling
18 Defendant to take split or duplicate samples of any samples it
19 takes as part of the Plaintiff's oversight of the Class A Settling
20 Defendant's implementation of the Work.

21 25. Class A Settling Defendant shall submit to EPA and the
22 State 3 copies of the results of all sampling and/or tests or other
23 data obtained or generated by or on behalf of Class A Settling
24 Defendant with respect to the Site and/or the implementation of
25 this Consent Decree unless EPA agrees otherwise.

26. Notwithstanding any provision of this Consent Decree, the United States hereby retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA and any other applicable statutes or regulations.

X. ACCESS AND DEED RESTRICTIONS

27. Commencing upon the date of lodging of this Consent Decree, the Class A Settling Defendant agrees to provide the United States and the State and their representatives, including EPA and its contractors, access at all reasonable times to the Site and any other property to which access is required for the implementation of this Consent Decree, to the extent access to the property is controlled by Class A Settling Defendant, for the purposes of conducting any activity related to this Consent Decree including, but not limited to:

- a. Monitoring the Work;
- b. Verifying any data or information submitted to the United States;
- c. Conducting investigations relating to contamination at or near the Site;
- d. Obtaining samples;
- e. Assessing the need for, planning, or implementing additional response actions at or near the Site;

f. Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Class A Settling Defendant or its agents, consistent with Section XXV; and

g. Assessing Class A Settling Defendant's compliance with this Consent Decree.

28. a. To the extent that the Site or any other property to which access is required for the implementation of this Consent Decree is owned or controlled by persons other than Class A Settling Defendant, Class A Settling Defendant shall use best efforts to secure from such persons access for Class A Settling Defendant, as well as for the United States and the State and their representatives, including, but not limited to, their contractors, as necessary to effectuate this Consent Decree. For purposes of this Paragraph "best efforts" includes the payment of reasonable sums of money in consideration of access. If any access required to complete the Work is not obtained within 45 days of the date of lodging of this Consent Decree, or within 45 days of the date EPA notifies the Class A Settling Defendant in writing that additional access beyond that previously secured is necessary, Class A Settling Defendant shall promptly notify the United States in writing, and shall include in that notification a summary of the steps Class A Settling Defendant has taken to attempt to obtain access. The United States may, as it deems appropriate, assist Class A Settling Defendant in obtaining access. Class A Settling Defendant shall reimburse the United States, in accordance with the

procedures in Section XVII (Reimbursement of Response Costs), for all costs incurred by the United States in obtaining access.

b. Notwithstanding any provision of this Consent Decree, the United States retains all of its access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA and any other applicable statute or regulations.

29. a. (i) Owner Settling Defendant shall, within 30 days of the entry of the Consent Decree, file in the land records of Winnebago County, Illinois, a notice, approved by EPA in consultation with the State, to subsequent purchasers of the property that it owns that is part of the Site, that hazardous substances were disposed of on the property and that EPA makes no representation as to the appropriate use of the property.

(ii) In the event that the Owner Settling Defendant transfers title or possession of any of its property that is part of the Site, it shall continue to be bound by all of the terms and conditions of this Decree and shall notify EPA prior to any such transfer.

(iii) Within 30 days of the entry of this Decree, the Owner Settling Defendant agrees to file in the land records of Winnebago County, Illinois, a deed/use restriction in the form attached hereto as Appendix F to protect public health and the environment and ensure that future use of the property will not impair or defeat any remedial measures or maintenance of remedial measures at the property.

b. To the extent that the Site or other areas where Work is to be performed hereunder are not owned by Owner Settling Defendant, Class A Settling Defendant shall use best efforts to cause the owners of such property to:

(i) file in the land records of Winnebago County, Illinois, a notice, approved by EPA, to subsequent purchasers of the land, that hazardous substances were disposed of on the property and that EPA makes no representation as to the appropriate use of the property;

(ii) notify EPA 60 days in advance of any transfer of the property;

(iii) record a notice of this Decree in the land records of Winnebago County, Illinois in the chain of title for each parcel of such property; and

(iv) file in the land records of Winnebago County, Illinois, a deed/use restriction for the property approved by EPA that is similar in form and substance to the deed/use restriction attached hereto as Appendix F to protect public health and the environment and to insure that future use of the property will not impair or defeat any remedial measures or maintenance of remedial measures at the property. For purposes of this paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of the above. If any of the above are not obtained despite best efforts within 45 days of the date of entry of this Decree, Class A Settling Defendant shall promptly notify the United States. The United States thereafter may assist Class A Settling

1 Defendant in obtaining the above, to the extent necessary to
2 effectuate the remedial action for the Site, using such means as it
3 deems appropriate. The United States' costs in this effort,
4 including the United States' attorney's fees and other expenses and
5 any compensation that the United States may be required to pay to
6 the property owner, shall be considered costs of response and shall
7 be reimbursed by Class A Settling Defendant in accordance with
8 Section XVII (Reimbursement of Response Costs).

10 XI. REPORTING REQUIREMENTS

11 30. In addition to any other requirement of this Consent
12 Decree, Class A Settling Defendant shall submit to EPA and the
13 State 3 copies of written monthly progress reports that: (a)
14 describe the actions which have been taken toward achieving
15 compliance with this Consent Decree during the previous month; (b)
16 include a summary of all results of sampling and tests and all
17 other data received or generated by Class A Settling Defendant or
18 its contractors or agents during the previous month; (c) identify
19 all work plans, plans and other deliverables required by this
20 Consent Decree completed and submitted during the previous month;
21 (d) describe all actions, including, but not limited to, data
22 collection and implementation of work plans, which are scheduled
23 for the next month and provide other information relating to the
24 progress of construction; (e) include information regarding
25 percentage of completion, unresolved delays encountered or
anticipating that may affect the future schedule for implementation

of the Work, and a description of efforts made to mitigate those delays or anticipated delays; (f) include any modifications to the work plans or other schedules that Class A Settling Defendant has proposed to EPA or that have been approved by EPA; and (g) describe all activities undertaken in support of the Community Relations Plan during the previous month and those to be undertaken in the next month. Class A Settling Defendant shall submit these progress reports to EPA and the State by the tenth day of every month following the lodging of this Consent Decree until EPA notifies the Class A Settling Defendant pursuant to Paragraph 46 of Section XV (Certification of Completion). If requested by EPA, Class A Settling Defendant shall also provide briefings for EPA to discuss the progress of the Work. Following the notification pursuant to Paragraph 46 of Section XV (Certification of Completion), the Class A Settling Defendant shall submit written quarterly progress reports (by the tenth day of the month following the completion of the quarter) summarizing the operation and maintenance activities carried out during the quarter, including the results of any sampling activities and descriptions of any problems encountered and the measures taken to solve these. When no work is required under a Remedial Design Work Plan or a Remedial Action Work Plan, then the Class A Settling Defendant shall submit written quarterly progress reports (by the tenth day of the month following the completion of the quarter), in place of the monthly progress reports, that describe the actions taken toward achieving compliance with this Consent Decree and the actions scheduled for

the next period and that summarize the operation and maintenance activities in the manner described above. When the conditions that permit the use of these quarterly progress reports in place of the monthly progress reports no longer exist or when a Remedial Design Work Plan or a Remedial Action Work Plan is being prepared, the Class A Settling Defendant shall submit monthly reports. When monthly progress reports are required and operation or maintenance of one or more elements of the Remedial Action is being performed, those activities that are part of operation and maintenance, including sampling and testing and other data collection that are part of the operation and maintenance activities, need only be reported quarterly.

31. The Class A Settling Defendant shall notify EPA of any change in the schedule described in the monthly progress report for the performance of any activity, including, but not limited to, data collection and implementation of work plans, no later than seven days prior to the performance of the activity.

32. Upon the occurrence of any event during performance of the Work that Class A Settling Defendant is required to report pursuant to Section 103 of CERCLA or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), Class A Settling Defendant shall within 24 hours of the onset of such event orally notify the EPA Project Coordinator or the Alternate EPA Project Coordinator (in the event of the unavailability of the EPA Project Coordinator), or, in the event that neither the EPA Project Coordinator or Alternate EPA Project Coordinator is available, the

Emergency Response Branch, Region V, United States Environmental Protection Agency. These reporting requirements are in addition to the reporting required by CERCLA Section 103 or EPCRA Section 304.

33. Within 20 days of the onset of such an event, Class A Settling Defendant shall furnish to Plaintiff a written report, signed by the Class A Settling Defendant's Project Coordinator, setting forth the events which occurred and the measures taken, and to be taken, in response thereto. Within 30 days of the conclusion of such an event, Class A Settling Defendant shall submit a report setting forth all actions taken in response thereto.

34. Class A Settling Defendant shall submit 3 copies of all plans, reports, and data required by the SOW, the Remedial Design Work Plan, the Remedial Action Work Plan, or any other approved plans to EPA in accordance with the schedules set forth in such plans. Class A Settling Defendant shall simultaneously submit 2 copies of all such plans, reports and data to the State.

35. All reports and other documents submitted by Class A Settling Defendant to EPA (other than the progress reports referred to above) which purport to document Class A Settling Defendant's compliance with the terms of this Consent Decree shall be signed by an authorized representative of the Class A Settling Defendant.

XII. SUBMISSIONS REQUIRING AGENCY APPROVAL

36. After review of any plan, report or other item which is required to be submitted for approval pursuant to this Consent Decree, EPA, after reasonable opportunity for review and comment by

the State, shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that the Class A Settling Defendant modify the submission; or (e) any combination of the above.

37. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 36(a), (b), or (c), Class A Settling Defendant shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA subject only to its right to invoke the Dispute Resolution procedures set forth in Section XX (Dispute Resolution) with respect to the modifications or conditions made by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Paragraph 36(c) and the submission has a material defect, EPA retains its right to seek stipulated penalties, as provided in Section XXI (Stipulated Penalties).

38. a. Upon receipt of a notice of disapproval pursuant to Paragraph 36(d), Class A Settling Defendant shall, within 14 days from the date of receipt of such notice or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Any stipulated penalties applicable to the submission, as provided in Section XXI (Stipulated Penalties), shall accrue during the 14-day period or otherwise specified period but shall not be payable

unless the resubmission is disapproved or modified due to a material defect as provided in Paragraph 39.

b. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 36(d), Class A Settling Defendant shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve Class A Settling Defendant of any liability for stipulated penalties under Section XXI (Stipulated Penalties).

39. In the event that a resubmitted plan, report or other item, or portion thereof, is disapproved by EPA, EPA may again require the Class A Settling Defendant to correct the deficiencies, in accordance with the preceding Paragraphs. EPA also retains the right to amend or develop the plan, report or other item. Class A Settling Defendant shall implement any such plan, report, or item as amended or developed by EPA, subject only to its right to invoke the procedures set forth in Section XX (Dispute Resolution).

40. If upon resubmission, a plan, report, or item is disapproved or modified by EPA due to a material defect, Class A Settling Defendant shall be deemed to have failed to submit such plan, report, or item timely and adequately unless the Class A Settling Defendant invokes the dispute resolution procedures set forth in Section XX (Dispute Resolution) and EPA's action is overturned pursuant to that Section. The provisions of Section XX (Dispute Resolution) and Section XXI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of

any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XXI.

41. All plans, reports, and other items required to be submitted to EPA under this Consent Decree shall, upon approval or modification by EPA, be enforceable under this Consent Decree. In the event EPA approves or modifies a portion of a plan, report, or other item required to be submitted to EPA under this Consent Decree, the approved or modified portion shall be enforceable under this Consent Decree.

XIII. PROJECT COORDINATORS

42. Within 20 days of lodging this Consent Decree, Class A Settling Defendant and EPA will notify each other, in writing, of the name, address and telephone number of its respective designated Project Coordinator(s) and, if determined to be necessary, Alternate Project Coordinator(s). If a Project Coordinator or Alternate Project Coordinator initially designated is changed, the identity of the successor will be given to the other party at least 5 working days before the changes occur, unless impracticable, but in no event later than the actual day the change is made. The Class A Settling Defendant's Project Coordinator shall be subject to disapproval by EPA if EPA determines that such Project Coordinator lacks the technical expertise sufficient to adequately oversee all aspects of the Work. The Class A Settling Defendant's

Project Coordinator shall not be an attorney for any of the Class A or Class B Settling Defendants in this matter. He or she may assign other representatives, including other contractors, to serve as a Site representative for oversight of performance of daily operations during remedial activities.

43. Plaintiff may designate other representatives, including, but not limited to, EPA employees, and federal contractors and consultants, to observe and monitor the progress of any activity undertaken pursuant to this Consent Decree. EPA's Project Coordinator and Alternate Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and an On-Scene Coordinator (OSC) by the National Contingency Plan, 40 C.F.R. Part 300. In addition, EPA's Project Coordinator or Alternate Project Coordinator shall have authority, consistent with the National Contingency Plan, to halt any Work required by this Consent Decree and to take any necessary response action when s/he determines that conditions at the Site constitute an emergency situation or may present an immediate threat to public health or welfare or the environment due to release or threatened release of Waste Material.

XIV. ASSURANCE OF ABILITY TO COMPLETE WORK

44. Within 30 days of entry of this Consent Decree, Class A Settling Defendant shall establish and maintain the following financial security: (a) one or more irrevocable letters of credit in the amount of \$3.5 million and (b) \$400,000 in a trust fund with

an independent trustee specifically and irrevocably reserved for the Site. In addition, until such time as EPA's then current total estimated cost of completing the Work under this Consent Decree is less than the total amount of the letters of credit plus the amount then in the trust fund, the Class A Settling Defendant shall on or before the date of each anniversary of the entry of the Consent Decree make an additional annual payment of \$400,000 to the trust fund, except that the parties recognize that this annual payment is dependent upon the Class A Settling Defendant receiving contributory payments of \$266,666 from other potentially responsible parties. In the event that in any future year Class A Settling Defendant fails to receive \$266,666 from the other potentially responsible parties, Class A Settling Defendant's payment into the trust fund for that year may be reduced to \$133,333 plus the amount (if any) of the contributory payments actually received by Class A Settling Defendant from the other potentially responsible parties. Class A Settling Defendant shall, within 20 days of the lodging of this Consent Decree, provide the United States with a copy of any contributory agreement with other potentially responsible parties. EPA's current estimate of the cost of completing the Work under this Consent Decree is \$6.2 million. The amount of financial security under this paragraph may not be reduced until EPA's then current total estimated cost of completing the Work under this Consent Decree is less than the total amount of the letters of credit plus the amount then in the trust fund. At that point in time, the amount of financial

1 security may be reduced provided that the amount of remaining
2 financial security equals or exceeds EPA's then current total
3 estimated cost of completing the Work under this Consent Decree.

4 45. The form of financial assurance described above shall be
5 determined by EPA in accordance with Section 811.713 of the
6 Illinois Administrative Code and 40 C.F.R. Part 264.145(a) and (d)
7 with such modifications as are necessary to conform with the
8 requirements of this Consent Decree. The Class A Settling
9 Defendant shall be entitled to utilize any financial assurances
10 provided under this Consent Decree to satisfy the requirements of
11 financial assurance to the State of Illinois under Subpart G of
12 Part 811 of the Illinois Administrative Code as long as doing so
13 does not adversely affect the financial security provided for the
14 performance of the Work under this Consent Decree. EPA shall not
15 withdraw any funds for the purpose of reimbursement of Future
16 Response Costs under Section XVII of this Consent Decree from the
17 financial assurances provided under this Consent Decree without
18 first making a written demand for the payment of Future Response
19 Costs from the Class A Settling Defendant in accordance with
20 Section XVII. Class A Settling Defendant's inability to
21 demonstrate financial ability to complete the Work shall not excuse
22 performance of any activities required under this Consent Decree.
23

XV. CERTIFICATION OF COMPLETION46. Completion of the Remedial Action

a. Within 90 days after Class A Settling Defendant concludes that the Remedial Action has been fully performed and the Performance Standards have been attained, Class A Settling Defendant shall schedule and conduct a pre-certification inspection to be attended by Class A Settling Defendants and EPA. If, after the pre-certification inspection, the Class A Settling Defendant still believes that the Remedial Action has been fully performed and the Performance Standards have been attained, it shall submit a written report requesting certification to EPA for approval, with a copy to the State, pursuant to Section XII (Submissions Requiring Agency Approval) within 30 days of the inspection. In the report, a registered professional engineer and the Class A Settling Defendant's Project Coordinator shall state that the Remedial Action has been completed in full satisfaction of the requirements of this Consent Decree. The written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by a responsible corporate official of the Class A Settling Defendant or the Class A Settling Defendant's Project Coordinator:

"To the best of my knowledge, information, and belief, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

1 If, after completion of the pre-certification inspection and
2 receipt and review of the written report, EPA, after reasonable
3 opportunity to review and comment by the State, determines that the
4 Remedial Action or any portion thereof has not been completed in
5 accordance with this Consent Decree or that the Performance
6 Standards have not been achieved, EPA will notify Class A Settling
7 Defendant in writing of the activities that must be undertaken to
8 complete the Remedial Action and achieve the Performance Standards.
9 EPA will set forth in the notice a schedule for performance of such
10 activities consistent with the Consent Decree and the SOW or
11 require the Class A Settling Defendant to submit a schedule to EPA
12 for approval pursuant to Section XII (Submissions Requiring Agency
13 Approval). Class A Settling Defendant shall perform all activities
14 described in the notice in accordance with the specifications and
15 schedules established pursuant to this Paragraph, subject to its
16 right to invoke the dispute resolution procedures set forth in
17 Section XX (Dispute Resolution).

18 b. If EPA concludes, based on the initial or any subsequent
19 report requesting Certification of Completion and after a
20 reasonable opportunity for review and comment by the State, that
21 the Remedial Action has been fully performed in accordance with
22 this Consent Decree and that the Performance Standards have been
23 achieved, EPA will so certify in writing to Class A Settling
24 Defendant. This certification shall constitute the Certification
25 of Completion of the Remedial Action for purposes of this Consent
Decree, including, but not limited to, Section XXII (Covenants Not

to Sue by Plaintiffs). Certification of Completion of the Remedial Action shall not affect Class A Settling Defendant's obligations under this Consent Decree.

47. Work After Certification of Completion of Remedial Action

As indicated in the SOW, Class A Settling Defendant shall continue to (1) operate the groundwater extraction and treatment systems in order to contain contamination at the Site so that Performance Standards will continue to be met; (2) operate the leachate management system; (3) operate the landfill gas system; and (4) perform other monitoring and maintenance activities after it has performed the Remedial Action and attained Performance Standards. Class A Settling Defendant may, at any time after the issuance of the Certification of Completion of Remedial Action, petition EPA and the State to modify or terminate the obligation to continue operation of some or all of these systems or other monitoring or maintenance obligations. Class A Settling Defendant's petition shall include a detailed description of the proposed modification or termination and demonstration that continuation of the activity to be modified or terminated is not necessary to meet Performance Standards or to protect human health or the environment or to protect against threats thereto. Based upon the petition and any other relevant information, EPA shall issue a written determination stating whether any or all of the activities may be modified or terminated and the basis for such determination. Upon a finding by EPA that resumption of a discontinued or modified activity is necessary to meet Performance Standards or to protect human health

or the environment or to protect against threats thereto, the Class A Settling Defendant shall resume such activity, subject to the provisions of Section XX (Dispute Resolution) of this Decree.

EPA's decisions and findings with respect to any petition under this Paragraph shall be deemed a determination pertaining to the selection or adequacy of response action and shall be subject to the dispute resolution provisions under Paragraph 64 of this Consent Decree. The grant of any petition by U.S. EPA pursuant to this Paragraph shall also be subject to the periodic review provisions of Section VIII (EPA Periodic Review) of this Decree.

XVI. EMERGENCY RESPONSE

48. In the event of any action or occurrence during the performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Class A Settling Defendant shall, subject to Paragraph 49, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify the EPA's Project Coordinator, or, if the Project Coordinator is unavailable, EPA's Alternate Project Coordinator. If neither of these persons is available, the Class A Settling Defendant shall notify the EPA, Emergency Response Branch, Region V. Class A Settling Defendant shall take such actions in consultation with EPA's Project Coordinator or other available authorized EPA officer and in accordance with all applicable

provisions of the Health and Safety Plans, the Contingency Plans, and any other applicable plans or documents developed pursuant to the SOW. In the event that Class A Settling Defendant fails to take appropriate response action as required by this Section, and EPA takes such action instead, Class A Settling Defendant shall reimburse EPA for all costs of the response action not inconsistent with the NCP pursuant to Section XVII (Reimbursement of Response Costs), subject to Class A Settling Defendant's right to invoke the provisions of Section XX (Dispute Resolution).

49. Nothing in the preceding Paragraph or in this Consent Decree shall be deemed to limit any authority of the United States to take, direct, or order all appropriate action or to seek an order from the Court to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site.

XVII. REIMBURSEMENT OF RESPONSE COSTS

AND PAYMENTS BY CLASS B SETTLING DEFENDANTS

50. a. Within 30 days of the effective date of this Consent Decree, Class A and Class B Settling Defendants shall pay to the United States a total of \$492,000.00, in reimbursement of Past Response Costs, by Electronic Funds Transfer ("EFT" or wire transfer) to the U.S Department of Justice lockbox bank, referencing CERCLA Number TJB 05B 679 and DOJ Case Number 90-11-3-712 and U.S.A.O. file number _____ (number to be furnished after the complaint has been filed). Payment shall be made in accordance

with instructions provided by the Plaintiff to the Class A and Class B Settling Defendants upon execution of the Consent Decree. Any EFTs received at the U.S. D.O.J. lockbox bank after 11:00 A.M. (Eastern Time) will be credited on the next business day. The amount of each Class A and Class B Settling Defendant's obligation to the United States under this paragraph is set forth in Appendix G. Such payments are neither penalties nor monetary sanctions.

b. Within 45 days of the entry of this Consent Decree, representatives of the Class A and Class B Settling Defendants shall establish a trust fund entitled "Pagel's Pit Landfill Trust Fund" (the "Trust Fund") with a Trustee acceptable to EPA. The Trust Fund will be opened in accordance with the terms set forth in Appendix H and will specify that the funds deposited into the Trust Fund will be used to provide financial assurance for the Work to be undertaken at the Site and reimbursement of Future Response Costs incurred or to be incurred at the Site.

c. Within 60 days of the entry of this Consent Decree, each Class B Settling Defendant shall pay to the Pagel's Pit Landfill Trust Fund the amount set forth in Appendix G. Such payments are neither penalties nor monetary sanctions.

d. The payments made by each Class B Settling Defendant under Subparagraphs 50.a. and 50.c. are intended to represent its share of the estimated future response costs, oversight costs, and past response costs incurred and to be incurred at the Site, including cost overruns incurred during implementation of the remedy and costs for supplemental remedies or additional work to be performed

1 in the event that the United States, in consultation with the
2 State, determines the implemented remedy is not protective of human
3 health or the environment.

4 e. By signing this Consent Decree, each Class B Settling
5 Defendant certifies, to the best of its knowledge and belief, the
6 following:

7 (i) The Class B Settling Defendant has made reasonable
8 inquiry to gather all information which relates in any way to its
9 ownership, operation, generation, treatment, transportation,
10 storage or disposal of hazardous substances at or in connection
11 with the Site, and has provided to the United States all such
12 information;

13 (ii) The amount of hazardous substances that the Class
14 B Settling Defendant may have arranged to be disposed of at the
15 Site or accepted for transport to the Site (if the Site was
16 selected by the Class B Settling Defendant) is, to the best of the
17 Class B Settling Defendant's knowledge, minimal in relation to the
18 total volume of the hazardous substances delivered to the Site and
19 is not significantly more toxic than other hazardous substances
20 sent to the Site; and

21 (iii) The covenant not to sue contained in this Consent
22 Decree is null and void, with respect to a Class B Settling
23 Defendant, if information not currently known to the United States
24 is discovered, and EPA determines that the new information
25 indicates that the Class B Settling Defendant contributed hazardous
26 substances to the Site in such greater amount or of such greater

1 toxic or other hazardous effect that the Settling Defendant no
2 longer qualifies as a Class B Settling Defendant.

3 51. Class A Settling Defendant shall reimburse the United
4 States for all Future Response Costs not inconsistent with the
5 National Contingency Plan incurred by the United States. The
6 United States will send Class A Settling Defendant a bill requiring
7 payment that includes a computer generated report, currently known
8 as the SPUR report, listing costs attributable to the Site on a
9 yearly basis. Class A Settling Defendant shall make all payments
10 within 30 days of Class A Settling Defendant's receipt of each bill
11 requiring payment, except as otherwise provided in Paragraph 52.
12 The Class A Settling Defendant shall make all payments required by
13 this Paragraph in the form of a certified check or checks made
14 payable to the "EPA Hazardous Substance Superfund" and referencing
15 CERCLA Number TJB 05B 679 and DOJ Case Number 90-11-3-712. The
16 Class A Settling Defendant shall forward the certified check(s) to
17 U.S. EPA, Superfund Accounting, P.O. Box 70753, Chicago, Illinois
18 60673 and shall send copies of the check(s) to the United States as
19 specified in Section XXVII (Notices and Submissions).

20 52. Class A Settling Defendant may contest payment of any
21 Future Response Costs under Paragraph 51 if it determines that the
22 United States has made an accounting error or if it alleges that a
23 cost item that is included represents costs that are inconsistent
24 with the NCP. Such objection shall be made in writing within 30
25 days of receipt of the bill and must be sent to the United States
pursuant to Section XXVII (Notices and Submissions). Any such

objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, the Class A Settling Defendant shall within the 30 day period pay all uncontested Future Response Costs to the United States in the manner described in Paragraph 51. Simultaneously, the Class A Settling Defendant shall establish an interest bearing escrow account in a federally-insured bank duly chartered in the State of Illinois and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. The Class A Settling Defendant shall send to the United States, as provided in Section XXVII (Notices and Submissions), a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, the Class A Settling Defendant shall initiate the Dispute Resolution procedures in Section XX (Dispute Resolution). If the United States prevails in the dispute, within 5 days of the resolution of the dispute, the Class A Settling Defendant shall pay the sums due (with accrued interest) to the United States in the manner described in Paragraph 51. If the Class A Settling Defendant prevails concerning any aspect of the contested costs, the Class A Settling Defendant shall pay that portion of the costs (plus associated accrued interest) for which

1 it did not prevail to the United States in the manner described in
2 Paragraph 51; Class A Settling Defendant shall be disbursed any
3 balance of the escrow account. The dispute resolution procedures
4 set forth in this Paragraph in conjunction with the procedures set
5 forth in Section XX (Dispute Resolution) shall be the exclusive
6 mechanisms for resolving disputes regarding the Class A Settling
7 Defendant's obligation to reimburse the United States for its
8 Future Response Costs.

53. In the event that the payments required by Paragraph 50.a
10 are not made within 30 days of the effective date of this Consent
11 Decree or the payments required by Paragraph 51 are not made within
12 30 days of the Class A Settling Defendant's receipt of the bill,
13 Class A or Class B Settling Defendant (as applicable) shall pay
14 interest on the unpaid balance at the rate established pursuant to
15 Section 107(a) of CERCLA, 42 U.S.C. § 9607. The interest to be
16 paid on Past Response Costs shall begin to accrue on the effective
date of the Consent Decree. The interest on Future Response Costs
18 shall begin to accrue on the date of the Class A Settling
19 Defendant's receipt of the bill. Interest shall accrue at the rate
20 specified through the date of the Class A or Class B Settling
21 Defendant's payment. Payments of interest made under this
22 Paragraph shall be in addition to such other remedies or sanctions
23 available to Plaintiffs by virtue of Class A or Class B Settling
24 Defendant's failure to make timely payments under this Section.
25

XVIII. INDEMNIFICATION AND INSURANCE

54. The United States does not assume any liability by entering into this agreement or by virtue of any designation of Class A Settling Defendant as EPA's authorized representative under Section 104(e) of CERCLA. Class A Settling Defendant shall indemnify, save and hold harmless the United States and its officials, agents, employees, contractors, subcontractors, or representatives for or from any and all claims or causes of action arising from, or on account of, acts or omissions of Class A Settling Defendant, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Consent Decree, including, but not limited to, any claims arising from any designation of Class A Settling Defendant as EPA's authorized representative under Section 104(e) of CERCLA. Further, the Class A Settling Defendant agrees to pay the United States all costs it incurs including, but not limited to, attorneys fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on acts or omissions of Class A Settling Defendant, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Consent Decree. The United States shall not be held out as a party to any contract entered into by or on behalf of Class A and Class B Settling Defendants in carrying out activities pursuant to this Consent Decree. Neither the Class

A nor the Class B Settling Defendants nor any such contractor shall be considered an agent of the United States.

55. Class A Settling Defendant waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between the Class A Settling Defendant and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Class A Settling Defendant shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between the Class A Settling Defendant and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

56. No later than 15 days before commencing any on-site Work, Class A Settling Defendant shall secure, and shall maintain until the first anniversary of EPA's Certification of Completion of the Remedial Action pursuant to Paragraph 46.b. of Section XV (Certification of Completion) comprehensive general liability insurance and automobile insurance with limits of \$5 million dollars, combined single limit naming as additional insured the United States. In addition, for the duration of this Consent Decree, Class A Settling Defendant shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation

insurance for all persons performing the Work on behalf of Class A Settling Defendant in furtherance of this Consent Decree. Prior to commencement of the Work under this Consent Decree, Class A Settling Defendant shall provide to EPA certificates of such insurance and a copy of each insurance policy. Class A Settling Defendant shall resubmit such certificates and copies of policies each year on the anniversary of the effective date of this Consent Decree. If Class A Settling Defendant demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, Class A Settling Defendant need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

XIX. FORCE MAJEURE

57. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of the Class A Settling Defendant or of any entity controlled by Class A Settling Defendant, including, but not limited to, its contractors and subcontractors, that delays or prevents the performance of any obligation under this Consent Decree despite Class A Settling Defendant's best efforts to fulfill the obligation. The requirement that the Class A Settling Defendant exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to

1 address the effects of any potential force majeure event (1) as it
2 is occurring and (2) following the potential force majeure event,
3 such that the delay is minimized to the greatest extent possible.
4 "Force Majeure" does not include financial inability to complete
5 the Work or a failure to attain the Performance Standards.

6 58. If any event occurs or has occurred that may delay the
7 performance of any obligation under this Consent Decree, whether or
8 not caused by a force majeure event, the Class A Settling Defendant
9 shall notify orally EPA's Project Coordinator or, in his or her
10 absence, EPA's Alternate Project Coordinator or, in the event both
11 of EPA's designated representatives are unavailable, the Director
12 of the Waste Management Division, EPA Region V, within 48 hours (or
13 the morning of the following business day if the 48-hour period
14 ends on Saturday, Sunday, or a federal holiday) of when Class A
15 Settling Defendant first knew or should have known that the event
16 might cause a delay. Within 10 days thereafter, Class A Settling
17 Defendant shall provide in writing to EPA an explanation and
18 description of the reasons for the delay; the anticipated duration
19 of the delay; all actions taken or to be taken to prevent or
20 minimize the delay; a schedule for implementation of any measures
21 to be taken to prevent or mitigate the delay or the effect of the
22 delay; the Class A Settling Defendant's rationale for attributing
23 such delay to a force majeure event if it intends to assert such a
24 claim; and a statement as to whether, in the opinion of the Class A
25 Settling Defendant, such event may cause or contribute to an
26 endangerment to public health, welfare or the environment. The

1 Class A Settling Defendant shall include with any notice all
2 available documentation supporting its claim that the delay was
3 attributable to a force majeure. Failure to comply with the above
4 requirements shall preclude Class A Settling Defendant from
5 asserting any claim of force majeure for that event. Class A
6 Settling Defendant shall be deemed to have notice of any
7 circumstance of which its contractors or subcontractors had or
8 should have had notice.

9 59. If EPA agrees that the delay or anticipated delay is
10 attributable to a force majeure event, the time for performance of
11 the obligations under this Consent Decree that are affected by the
12 force majeure event will be extended by EPA for such time as is
13 necessary to complete those obligations. An extension of the time
14 for performance of the obligations affected by the force majeure
15 event shall not, of itself, extend the time for performance of any
16 other obligation. If EPA does not agree that the delay or
17 anticipated delay has been or will be caused by a force majeure
18 event, EPA will notify the Class A Settling Defendant in writing of
19 its decision. If EPA agrees that the delay is attributable to a
20 force majeure event, EPA will notify the Class A Settling Defendant
21 in writing of the length of the extension, if any, for performance
22 of the obligations affected by the force majeure event.

23 60. If the Class A Settling Defendant elects to invoke the
24 dispute resolution procedures set forth in Section XX (Dispute
25 Resolution), it shall do so no later than 15 days after receipt of
26 EPA's notice. In any such proceeding, Class A Settling Defendant

shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Class A Settling Defendant complied with the requirements of Paragraphs 57 and 58, above. If Class A Settling Defendant carries this burden, the delay at issue shall be deemed not to be a violation by Class A Settling Defendant of the affected obligation of this Consent Decree identified to EPA and the Court.

XX. DISPUTE RESOLUTION

61. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. However, the procedures set forth in this Section shall not apply to actions by the United States to enforce obligations of the Class A Settling Defendant that have not been disputed in accordance with this Section.

62. Any dispute which arises under or with respect to this Consent Decree shall in the first instance be the subject of informal negotiations between the parties to the dispute. The period for informal negotiations shall not exceed 20 days from the time the dispute arises, unless it is modified by written agreement of the parties to the dispute. The dispute shall be considered to

have arisen when one party sends the other parties a written Notice of Dispute.

63. a. In the event that the parties cannot resolve a dispute by informal negotiations under the preceding Paragraph, then the position advanced by EPA shall be considered binding unless, within 10 days after the conclusion of the informal negotiation period, Class A Settling Defendant invokes the formal dispute resolution procedures of this Section by serving on the United States a written Statement of Position on the matter in dispute, including, but not limited to, any factual data, analysis or opinion supporting that position and any supporting documentation relied upon by the Class A Settling Defendant. The Statement of Position shall specify the Class A Settling Defendant's position as to whether formal dispute resolution should proceed under Paragraph 64 or 65.

b. Within fourteen (14) days after receipt of Class A Settling Defendant's Statement of Position, EPA will serve on Class A Settling Defendant its Statement of Position, including, but not limited to, any factual data, analysis, or opinion supporting that position and all supporting documentation relied upon by EPA. EPA's Statement of Position shall include a statement as to whether formal dispute resolution should proceed under Paragraph 64 or 65.

c. If there is disagreement between EPA and the Class A Settling Defendant as to whether dispute resolution should proceed under Paragraph 64 or 65, the parties to the dispute shall follow the procedures set forth in the Paragraph determined by EPA to be

1 applicable. However, if the Class A Settling Defendant ultimately
2 appeals to the court to resolve the dispute, the Court shall
3 determine which Paragraph is applicable in accordance with the
4 standards of applicability set forth in Paragraphs 64 and 65.

5 64. Formal dispute resolution for disputes pertaining to the
6 selection or adequacy of any response action and all other disputes
7 that are accorded review on the administrative record under
8 applicable principles of administrative law shall be conducted
9 pursuant to the procedures set forth in this Paragraph. For
10 purposes of this Paragraph, the adequacy of any response action
11 includes, without limitation: (1) the adequacy or appropriateness
12 of plans, procedures to implement plans, or any other items
13 requiring approval by EPA under this Consent Decree; and (2) the
14 adequacy of the performance of response actions taken pursuant to
15 this Consent Decree. Nothing in this Consent Decree shall be
16 construed to allow any dispute by Class A Settling Defendant
17 regarding the validity of the ROD's provisions.

18 a. An administrative record of the dispute shall be
19 maintained by EPA and shall contain all statements of position,
20 including supporting documentation, submitted pursuant to this
21 Paragraph. Where appropriate, EPA may allow submission of
22 supplemental statements of position by the parties to the dispute.

23 b. The Director of the Waste Management Division, EPA Region
24 V, will issue a final administrative decision resolving the dispute
25 based on the administrative record described in Paragraph 64.a.
26 This decision shall be binding upon the Class A Settling Defendant,

1 subject only to the right to seek judicial review pursuant to
2 Paragraph 64.c. and d.

3 c. Any administrative decision made by EPA pursuant to
4 Paragraph 64.b. shall be reviewable by this Court, provided that a
5 notice of judicial appeal is filed by the Class A Settling
6 Defendant with the Court and served on all Parties within 10 days
7 of receipt of EPA's decision. The notice of judicial appeal shall
8 include a description of the matter in dispute, the efforts made by
9 the parties to resolve it, the relief requested, and the schedule,
10 if any, within which the dispute must be resolved to ensure orderly
11 implementation of this Consent Decree. The United States may file
12 a response to Class A Settling Defendant's notice of judicial
13 appeal.

14 d. In proceedings on any dispute governed by this Paragraph,
15 Class A Settling Defendant shall have the burden of demonstrating
16 that the decision of the Waste Management Division Director is
17 arbitrary and capricious or otherwise not in accordance with law.
18 Judicial review of EPA's decision shall be on the administrative
19 record compiled pursuant to Paragraphs 64.a.

20 65. Formal dispute resolution for disputes that neither
21 pertain to the selection or adequacy of any response action nor are
22 otherwise accorded review on the administrative record under
23 applicable principles of administrative law, shall be governed by
24 this Paragraph.

25 a. Following receipt of Class A Settling Defendant's
26 Statement of Position submitted pursuant to Paragraph 63, the

Director of the Waste Management Division, EPA Region V, will issue a final decision resolving the dispute. The Waste Management Division Director's decision shall be binding on the Class A Settling Defendant unless, within 10 days of receipt of the decision, the Class A Settling Defendant files with the Court and serves on the parties a notice of judicial appeal setting forth the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of the Consent Decree. The United States may file a response to Class A Settling Defendant's notice of judicial appeal.

b. Notwithstanding Paragraph L of Section I (Background) of this Consent Decree, judicial review of any dispute governed by this Paragraph shall be governed by applicable provisions of law.

66. The invocation of formal dispute resolution procedures under this Section shall not extend, postpone or affect in any way any obligation of the Class A Settling Defendant under this Consent Decree not directly in dispute, unless EPA or the Court agrees otherwise. Stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute as provided in Paragraph 74.

Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Consent Decree. In the event that the Class A Settling Defendant does not prevail on the disputed issue,

stipulated penalties shall be assessed and paid as provided in Section XXI (Stipulated Penalties).

XXI. STIPULATED PENALTIES

67. Class A Settling Defendant shall be liable for stipulated penalties in the amounts set forth in Paragraphs 68 and 69 to the United States for failure to comply with the requirements of this Consent Decree specified below, unless excused under Section XIX (Force Majeure). "Compliance" by Class A Settling Defendant shall include completion of the activities under this Consent Decree or any work plan or other plan approved under this Consent Decree identified below in accordance with all applicable requirements of law, this Consent Decree, the SOW, and any plans or other documents approved by EPA pursuant to this Consent Decree and within the specified time schedules established by and approved under this Consent Decree. Nothing in this Consent Decree shall be construed as imposing a stipulated penalty on Class A Settling Defendant in the event that Class A Settling Defendant fails to undertake response actions pursuant to Sections VII or VIII of this Consent Decree.

68. The following stipulated penalties shall be payable per violation per day to the United States for any noncompliance identified here:

	Up to 30 days	31 to 60 days	Over 60 days
Failure to complete following components of remedial action:			
Groundwater extraction and treatment	\$2,500	\$7,500	\$10,000
Monitoring Systems	\$2,500	\$7,500	\$10,000
Landfill closure	\$2,500	\$7,500	\$10,000
Failure to comply with any schedule contained within a work plan	\$2,500	\$7,500	\$10,000
Failure to comply with notice requirements of this Consent Decree	\$500	\$2,000	\$5,000
Failure to take action to abate an endangerment under Section XVI	\$10,000	\$15,000	\$20,000

69. The following stipulated penalties shall be payable per violation per day to the United States for failure to submit timely or adequate reports or other written documents:

	Up to 30 days	31 to 60 days	Over 60 days
Failure to submit progress reports	\$500	\$1,000	\$2,500
Failure to submit Work Plan, including the following:	\$2,500	\$7,500	\$10,000
Health and Safety Plan	\$2,500	\$7,500	\$10,000
Quality Assurance Project Plan	\$2,500	\$7,500	\$10,000
Sampling and Analysis Plan	\$2,500	\$7,500	\$10,000
Plan for Permitting Requirements	\$2,500	\$7,500	\$10,000
Schedule for Remedial Action Implementation	\$2,500	\$7,500	\$10,000

Schedule for Submittal of Remedial Design Tasks	\$2,500	\$7,500	\$10,000
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For purposes of this paragraph, an item shall be deemed submitted when deposited in the United States mail, first-class postage paid.

70. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Decree.

71. Following EPA's determination that Class A Settling Defendant has failed to comply with a requirement of this Consent Decree, EPA may give Class A Settling Defendant written notification of the same and describe the noncompliance. EPA may send the Class A Settling Defendant a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified the Class A Settling Defendant of a violation.

72. All penalties owed to the United States under this section shall be due and payable within 30 days of the Class A Settling Defendant's receipt from EPA of a demand for payment of the penalties, unless Class A Settling Defendant invokes the Dispute Resolution procedures under Section XX (Dispute Resolution). All payments under this Section shall be paid by certified check made payable to "EPA Hazardous Substances Superfund," shall be mailed to U.S. EPA, Superfund Accounting, P.O.

Box 70753, Chicago, Illinois 60673, and shall reference CERCLA Number TJB 05B 679 and DOJ Case Number 90-11-3-712. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to the United States as provided in Section XXVII (Notices and Submissions).

73. The payment of penalties shall not alter in any way Class A Settling Defendant's obligation to complete the performance of the Work required under this Consent Decree.

74. Penalties shall continue to accrue as provided in Paragraph 70 during any dispute resolution period, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to this Court, accrued penalties determined to be owing shall be paid to EPA within 15 days of the agreement or the receipt of EPA's decision or order;

b. If the dispute is appealed to this Court and the United States prevails in whole or in part, Class A Settling Defendant shall pay all accrued penalties determined by the Court to be owed to EPA within 60 days of receipt of the Court's decision or order, except as provided in Subparagraph c below;

c. If the District Court's decision is appealed by any Party, Class A Settling Defendant shall pay all accrued penalties determined by the District Court to be owing to the United States into an interest-bearing escrow account within 60 days of receipt of the Court's decision or order. Penalties shall be paid into this account as they continue to accrue, at least every 60 days.

Within 15 days of receipt of the final appellate court decision, the escrow agent shall pay the balance of the account to EPA or to Class A Settling Defendant to the extent that it prevails.

d. Notwithstanding the above provisions, EPA may, in its unreviewable discretion, grant a reduction in the stipulated penalties that accrued during the dispute resolution period.

75. a. If Class A Settling Defendant fails to pay stipulated penalties when due, the United States may institute proceedings to collect the penalties, as well as interest. Class A Settling Defendant shall pay interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 72 at the rate established pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607.

b. Nothing in this Consent Decree shall be construed as prohibiting, altering, or in any way limiting the ability of the United States to seek any other remedies or sanctions available by virtue of Class A and Class B Settling Defendants' violation of this Decree or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(1) of CERCLA.

76. No payments made under this Section shall be tax deductible for Federal or State tax purposes.

XXII. COVENANTS NOT TO SUE BY PLAINTIFFS

77. In consideration of the actions that will be performed and the payments that will be made by the Class A and Class B

Settling Defendants under the terms of the Consent Decree, and except as specifically provided in Paragraphs 78, 79, and 81 of this Section, the United States covenants not to sue or to take administrative action against Class A and Class B Settling Defendants pursuant to Sections 106 and 107(a) of CERCLA relating to the Site. Except with respect to future liability for Class A Settling Defendant, these covenants not to sue shall take effect upon the receipt by EPA and the Pagel's Pit Landfill Trust Fund of the payments required by Paragraph 50 of Section XVII (Reimbursement of Response Costs). With respect to future liability for Class A Settling Defendant, these covenants not to sue shall take effect upon Certification of Completion of Remedial Action by EPA pursuant to Paragraph 46.b of Section XV (Certification of Completion). The covenants not to sue for the Class A Settling Defendant are contingent upon complete and satisfactory performance by the Class A Settling Defendant of its obligations under the Consent Decree. The covenants not to sue for each Class B Settling Defendant is contingent upon the complete and satisfactory performance of its obligations under the Consent Decree. These covenants not to sue extend only to the Class A and Class B Settling Defendants and do not extend to any other person.

78. United States' Pre-certification reservations.

With respect to Class A Settling Defendant, notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action,

or to issue an administrative order seeking to compel Class A Settling Defendant (1) to perform further response actions relating to the Site or (2) to reimburse the United States for additional costs of response, if, prior to certification of completion of the Remedial Action:

(i) conditions at the Site, previously unknown to EPA, are discovered, or

(ii) information, previously unknown to EPA, is received, in whole or in part,

and these previously unknown conditions or not previously received information together with any other relevant information indicates that the Remedial Action is not protective of human health or the environment.

79. United States' Post-certification reservations.

With respect to Class A Settling Defendant, notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel Class A Settling Defendant (1) to perform further response actions relating to the Site or (2) to reimburse the United States for additional costs of response, if, subsequent to certification of completion of the Remedial Action:

(i) conditions at the Site, previously unknown to the EPA, are discovered, or

(ii) information, previously unknown to EPA, is received, in whole or in part, after the certification of completion,

and these previously unknown conditions or this information together with other relevant information indicate that the Remedial Action is not protective of human health or the environment.

80. For purposes of Paragraph 78, the information and the conditions known to EPA shall include only that information and those conditions set forth in the Record of Decision for the Pagel's Pit Landfill site dated June 28, 1991, the administrative record supporting that Record of Decision, the Record of Decision for the Acme Solvent Reclaiming, Inc. site dated December 31, 1990, and the administrative record supporting that Record of Decision. For purposes of Paragraph 79, the information and the conditions known to EPA shall include only that information and those conditions set forth in the Record of Decision for the Pagel's Pit Landfill site dated June 28, 1991, the administrative record supporting that Record of Decision, the Record of Decision for the Acme Solvent Reclaiming, Inc. site dated December 31, 1990, the administrative record supporting that Record of Decision, and any information received by EPA pursuant to the requirements of this Consent Decree prior to Certification of Completion of the Remedial Action.

81. General reservations of rights.

a. Class A Settling Defendant. The covenants not to sue set forth above do not pertain to any matters other than those

expressly specified in Paragraph 77. The United States reserves, and this Consent Decree is without prejudice to, all rights against Class A Settling Defendant with respect to all other matters, including but not limited to, the following:

(1) claims based on a failure by Class A Settling Defendant to meet a requirement of this Consent Decree;

(2) liability for contamination in the area in the vicinity of the southeast portion of the Site (as more particularly indicated on the map attached as Appendix C);

(3) liability arising from the past, present, or future disposal of Waste Materials outside of the Site, or the release or threat of release of such Waste Materials;

(4) liability for damages for injury to, destruction of, or loss of natural resources;

(5) liability for response costs that have been or may be incurred by any trustees for natural resources;

(6) criminal liability;

(7) liability for violations of federal or state law which occur during or after implementation of the Remedial Action;

(8) liability arising from any operations at the Site after the date of lodging of this Consent Decree; and

(9) liability of the Class A Settling Defendant based on a contract, agreement, or other arrangement for disposal or treatment of hazardous substances at the Site or transport of

hazardous substances to the Site after the date of lodging of this Consent Decree.

Except as provided in Paragraph 89, Class A Settling Defendant reserves all rights, defenses, and objections to the matters contained in Subparagraphs (2)-(9) above.

b. Class B Settling Defendants. The covenants not to sue set forth above do not pertain to any matters other than those expressly specified in Paragraph 77. The United States reserves, and this Consent Decree is without prejudice to, all rights against Class B Settling Defendants with respect to all other matters, including but not limited to, the following:

(1) claims based on a failure of the Class B Settling Defendant to meet a requirement of this Consent Decree;

(2) liability for contamination in the area in the vicinity of the southeast portion of the Site (as more particularly indicated on the map attached as Appendix C);

(3) liability arising from the past, present, or future disposal of Waste Materials outside of the Site, or the release or threat of release of such Waste Materials;

(4) liability for damages for injury to, destruction of, or loss of natural resources;

(5) liability for response costs that have been or may be incurred by any trustees for natural resources;

(6) criminal liability;

(7) liability of an individual Class B Settling Defendant based on a contract, agreement, or other arrangement

for disposal or treatment of hazardous substances at the Site or transport of hazardous substances to the Site after the date of lodging of this Consent Decree; and

(8) liability of the Class B Settling Defendants to perform the response actions or reimburse the United States for its costs of response under this Consent Decree, including, without limitations, Paragraphs 78 and 79, in the event that both of the following conditions occur: (A) Winnebago Reclamation Service, Inc. is financially unable fully to perform the response actions or to reimburse the United States fully for its costs of response under this Consent Decree, including, without limitations, Paragraphs 78 and 79; and (B) any financial security provided by Class A Settling Defendant Winnebago Reclamation Service, Inc. pursuant to Paragraph 44 has been exhausted.

Except as provided in Paragraph 89, Class B Settling Defendants reserve all rights, defenses, and objections to the matters contained in Subparagraphs (2)-(8) above.

82. In the event EPA determines that Class A Settling Defendant has failed to implement any provisions of the Work in an adequate or timely manner, EPA may perform any and all portions of the Work as EPA determines necessary. Class A Settling Defendant may invoke the procedures set forth in Section XX (Dispute Resolution) to dispute EPA's determination that the Class A Settling Defendant failed to implement a provision of the Work in an adequate or timely manner as arbitrary and capricious or

otherwise not in accordance with law. Such dispute shall be resolved on the administrative record. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Class A Settling Defendant shall pay pursuant to Section XVII (Reimbursement of Response Costs).

83. Notwithstanding any other provision of this Consent Decree, the United States retains all authority and reserves all rights to take any and all response actions authorized by law.

XXIII. COVENANTS BY SETTLING DEFENDANTS

84. Class A and Class B Settling Defendants hereby covenant not to sue and agree not to assert any claims or causes of action against the United States with respect to the Site or this Consent Decree, including, but not limited to, any direct or indirect claim for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through CERCLA Sections 106(b)(2), 111, 112, 113 or any other provision of law, any claim against the United States, including any department, agency or instrumentality of the United States under CERCLA Sections 107 or 113 related to the Site, or any claims arising out of response activities at the Site. However, the Class A and Class B Settling Defendants reserve, and this Consent Decree is without prejudice to, actions against the United States based on negligent actions taken directly by the United States (not including oversight or approval of the Class A Settling

Defendant's plans or activities) that are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA. Nothing in this Consent Decree shall be deemed to constitute preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXIV. EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION

85. Nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a party to this Consent Decree. The preceding sentence shall not be construed to waive or nullify any rights that any person not a signatory to this decree may have under applicable law. Each of the Parties expressly reserves any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a party hereto.

86. a. With regard to claims for contribution against Class A Settling Defendant for matters addressed in this Consent Decree, the Parties hereto agree that the Class A Settling Defendant is entitled to such protection from contribution actions or claims as is provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2).

b. With regard to claims for contribution against Class B Settling Defendants for matters addressed in this Consent Decree, the Parties hereto agree that the Class B Settling Defendants are

entitled to such protection from contribution actions or claims as is provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2) and CERCLA Section 122(g), 42 U.S.C. § 9622(g).

87. The Class A and Class B Settling Defendants agree that with respect to any suit or claim for contribution brought by them for matters related to this Consent Decree they will notify the United States in writing no later than 60 days prior to the initiation of such suit or claim.

88. The Class A and Class B Settling Defendants also agree that with respect to any suit or claim for contribution brought against them for matters related to this Consent Decree they will notify in writing the United States within 10 days of service of the complaint on them. In addition, Class A and Class B Settling Defendants shall notify the United States within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial.

89. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, neither Class A nor Class B Settling Defendants shall assert, nor maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability

of the covenants not to sue set forth in Section XXII (Covenants Not to Sue by Plaintiffs).

XXV. ACCESS TO INFORMATION

90. Class A Settling Defendant shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Consent Decree, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Class A Settling Defendant shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

91. a. Class A and Class B Settling Defendants may assert business confidentiality claims covering part or all of the documents or information submitted to Plaintiffs under this Consent Decree to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA, or if EPA has notified Class A and Class B Settling Defendants that the documents

1 or information are not confidential under the standards of Section
2 104(e)(7) of CERCLA, the public may be given access to such
3 documents or information without further notice to Class A and
4 Class B Settling Defendants.

5 b. The Class A and Class B Settling Defendants may assert
6 that certain documents, records and other information are
7 privileged under the attorney-client privilege or any other
8 privilege recognized by federal law. If the Class A and Class B
9 Settling Defendants assert such a privilege in lieu of providing
10 documents, they shall provide the Plaintiffs with the following:
11 (1) the title of the document, record, or information; (2) the date
12 of the document, record, or information; (3) the name and title of
13 the author of the document, record, or information; (4) the name
14 and title of each addressee and recipient; (5) a description of the
15 contents of the document, record, or information; and (6) the
16 privilege asserted by Class A and Class B Settling Defendants.
17 However, no documents, reports or other information created or
18 generated pursuant to the requirements of the Consent Decree shall
19 be withheld on the grounds that they are privileged.

20 92. No claim of confidentiality shall be made with respect to
21 any data, including, but not limited to, all sampling, analytical,
22 monitoring, hydrogeologic, scientific, chemical, or engineering
23 data, or any other documents or information evidencing conditions
24 at or around the Site.
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XXVI. RETENTION OF RECORDS

93. Until 10 years after the Class A and Class B Settling Defendants' receipt of EPA's notification pursuant to Paragraph 46.b of Section XV (Certification of Completion of the Work), the Class A Settling Defendant and each Class B Settling Defendant shall preserve and retain all records and documents now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or liability of any person for response actions conducted and to be conducted at the Site, regardless of any corporate retention policy to the contrary. Until 10 years after the Class A and Class B Settling Defendants' receipt of EPA's notification pursuant to Paragraph 46.b of Section XV (Certification of Completion), Class A and Class B Settling Defendants shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to the performance of the Work.

94. At the conclusion of this document retention period, Class A and Class B Settling Defendants shall notify the United States at least 90 days prior to the destruction of any such records or documents, and, upon request by the United States, Class A and Class B Settling Defendants shall deliver any such records or documents to EPA. The Class A and Class B Settling Defendants may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Class A and Class B

Settling Defendants assert such a privilege, they shall provide the Plaintiff with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information: and (6) the privilege asserted by Class A and Class B Settling Defendants. However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

95. Each Class A or Class B Settling Defendant hereby certifies, individually, that to the best of its knowledge and belief it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information relating to its potential liability regarding the Site since notification of potential liability by the United States or the State or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Section 104(e) and 122(e) of CERCLA and Section 3007 of RCRA.

XXVII. NOTICES AND SUBMISSIONS

96. Whenever, under the terms of this Consent Decree, written notice is required to be given or a report or other document is required to be sent by one party to another, it shall be directed

to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other parties in writing. All notices and submissions shall be considered effective upon receipt, unless otherwise provided. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of the Consent Decree with respect to the United States, EPA, and the Class A and Class B Settling Defendants, respectively. Notice need not be given to the Class B Settling Defendants for reports required by Section IX and dispute resolution notices or submissions unless the interest of a Class B Settling Defendant is specifically implicated. In such case, notice shall be sent to the interested parties listed in Appendix G.

As to the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Ben Franklin Station
Washington, D.C. 20044
Re: DOJ # 90-11-3-712

and

William E. Muno
Acting Director, Waste Management Division
United States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

As to EPA:

Bernard J. Schorle
EPA Project Coordinator
United States Environmental Protection Agency
Region V (HSRL-6J)
77 West Jackson Boulevard
Chicago, Illinois 60604

As to the State:

Paul Takacs
State Project Coordinator
Illinois Environmental Protection Agency
P.O. Box 19276
Springfield, Illinois 62794-9276

As to the Settling Defendants:

John Holmstrom III
Winnebago Reclamation Service, Inc.
4920 Forest Hills Road
Loves Park, Illinois 61111
P.O. Box 2071
Loves Park, Illinois 61130

[Name]

Class A Settling Defendant's Project Coordinator

[Address]

XXVIII. EFFECTIVE DATE

97. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court, except as otherwise provided herein.

XXIX. RETENTION OF JURISDICTION

98. This Court retains jurisdiction over both the subject matter of this Consent Decree and the Class A and Class B Settling Defendants for the duration of the performance of the terms and provisions of this Consent Decree for the purpose of enabling any

of the Parties to apply to the Court at any time for such further order, direction, and relief as may be necessary or appropriate for the construction or modification of this Consent Decree, or to effectuate or enforce compliance with its terms, or to resolve disputes in accordance with Section XX (Dispute Resolution) hereof.

XXX. APPENDICES

99. The following appendices are attached to and incorporated into this Consent Decree:

"Appendix A" is the ROD.

"Appendix B" is the SOW.

"Appendix C" is the map of the Site.

"Appendix D" is the Owner Settling Defendant.

"Appendix E" is the name of the Class A Settling Defendant.

"Appendix F" is the deed/use restriction form.

"Appendix G" is a list of Class B Settling Defendants and a record of Class A and Class B Settling Defendants' payments for past response costs and Class B Settling Defendants' payments to the Pagel's Pit Landfill Trust Fund.

"Appendix H" is the Trust Fund Agreement.

XXXI. COMMUNITY RELATIONS

100. Class A Settling Defendant shall propose to EPA its participation in the community relations plan to be developed by EPA. EPA will determine the appropriate role for the Class A Settling Defendant under the Plan. Class A Settling Defendant

1 shall also cooperate with EPA in providing information regarding
2 the Work to the public. As requested by EPA, Class A Settling
3 Defendant shall participate in the preparation of such information
4 for dissemination to the public and in public meetings which may be
5 held or sponsored by EPA to explain activities at or relating to
6 the Site.

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XXXII. MODIFICATION

101. Schedules specified in this Consent Decree for
completion of the Work may be modified by agreement of EPA and the
Class A Settling Defendant after an opportunity for review and
comment by the State. All such modifications shall be made in
writing.

102. No material modifications shall be made to the SOW
without written notification to and written approval of the United
States, Class A Settling Defendant, and the Court. Prior to
providing its approval to any modification, the United States will
provide the State with a reasonable opportunity to review and
comment on the proposed modification. Modifications to the SOW
that do not materially alter that document may be made by written
agreement between EPA, after providing the State with a reasonable
opportunity to review and comment on the proposed modification, and
the Class A Settling Defendant.

103. Nothing in this Decree shall be deemed to alter the
Court's power to enforce, supervise or approve modifications to
this Consent Decree.

XXXIII. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

104. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) days for public notice and comment in accordance with Section 122(d)(2) of CERCLA, 42 U.S.C. § 9622(d)(2), and 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. Class A and Class B Settling Defendants consent to the entry of this Consent Decree without further notice, but reserve the right to be consulted upon any modifications proposed by Plaintiff or the Court, and to withdraw their consent if they deem such modification unacceptable.

105. If for any reason the Court should decline to approve this Consent Decree in the form presented, this agreement is voidable at the sole discretion of any party and the terms of the agreement may not be used as evidence in any litigation between the Parties.

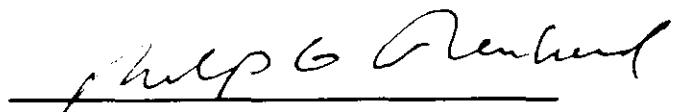
XXXIV. SIGNATORIES/SERVICE

106. Each undersigned representative of the Class A Settling Defendant and a Class B Settling Defendant and the Assistant Attorney General for Environment and Natural Resources of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such party to this document.

107. Each Class A and Class B Settling Defendant hereby agrees not to oppose entry of this Consent Decree by this Court or to challenge any provision of this Consent Decree unless the United States has notified the Class A and Class B Settling Defendants in writing that it no longer supports entry of the Consent Decree.

108. Each Class A and Class B Settling Defendant shall identify, on the attached signature page, the name, address and telephone number of an agent who is authorized to accept service of process by mail on behalf of that party with respect to all matters arising under or relating to this Consent Decree. Class A and Class B Settling Defendants hereby agree to accept service in that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons.

SO ORDERED THIS 10th DAY OF February, 1993



United States District Judge

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Landfill Superfund Site.

FOR THE UNITED STATES OF AMERICA

Date:

11/20/92

Vicki A. O'Meara

Vicki A. O'Meara
Acting Assistant Attorney General
Environment and Natural Resources
Division
U.S. Department of Justice
Washington, D.C. 20530

Fred Foreman
United States Attorney
Northern District of Illinois

by:

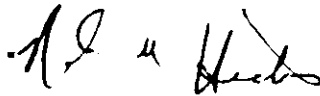
Keith C. Syfert
Keith C. Syfert
Assistant United States Attorney
Northern District of Illinois
Western Division
U.S. Department of Justice
211 S. Court Street
Rockford, IL 61101

Alan S. Tenenbaum

Alan S. Tenenbaum
Leslie Lehnert
Environmental Enforcement Section
Environment and Natural Resources
Division
U.S. Department of Justice
Washington, D.C. 20530



Valdas V. Adamkus
Regional Administrator, Region V
U.S. Environmental Protection
Agency
77 West Jackson Blvd.
Chicago, Illinois 60604



Nola M. Hicks
Assistant Regional Counsel
U.S. Environmental Protection
Agency
Region V
77 West Jackson Blvd.
Chicago, Illinois 60604

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Landfill Superfund Site.

FOR Winnebago Reclamation Service, COMPANY, INC. */

Date: August 19, 1992

Name	<u>Gary L. Marzocchi</u>
Title	Executive Vice President
Address	4920 Forest Hills Rd.
(Please type)	Loves Park, IL 61111

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name:	<u>John Holmstrom III</u>	[Please type]
Title:	<u>General Counsel</u>	
Address:	<u>4920 Forest Hills Rd., Loves</u>	Park, IL 61111
Tel. Number:	<u>(815) 654-4711</u>	

*/ A separate signature page must be signed by each corporation, individual or other legal entity that is settling with the United States.

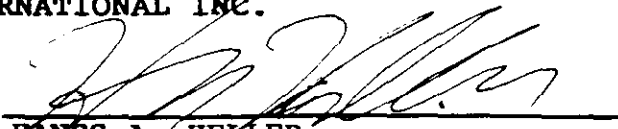
THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Landfill Superfund Site.

FOR ACME RESIN CORPORATION
BY CPC INTERNATIONAL INC.

~~COMPANED XEROX~~ */

Date: August 21, 1992

Name
Title
Address
(Please type)


JAMES A. HELLER
ASSISTANT SECRETARY
CPC INTERNATIONAL INC.
INTERNATIONAL PLAZA
POST OFFICE BOX 8000
ENGLEWOOD CLIFFS, NEW JERSEY 07632

Agent Authorized to Accept Service on Behalf of Above-signed Party:


Name: Henry D. Nelkin, Esq. [Please type]
Title: Attorney
Address: Bivona & Cohen, Wall Street Plaza, 98 Pine Street,
Tel. Number: (212) 363-3100 New York, NY 10005

*/ A separate signature page must be signed by each corporation, individual or other legal entity that is settling with the United States.

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

FOR Barber-Colman COMPANY ~~XXXXXX~~ INC ~~*/~~

Date: September 11, 1992
Name
Title
Address
(Please type)


Robert Hammes, Secretary
555 Colman Center, Rockford, Illinois

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Robert Hammes [Please type]
Title: Secretary
Address: 555 Colman Center, Rockford, IL
Tel. Number: (815) 397-7400

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

Browning-Ferris Industries
FOR of Illinois, Inc. COMPANY, INC. */

Date: August 20, 1992

Name	<u>Gerald K. Burger</u>
Title	Gerald K. Burger
Address	Vice President
(Please type)	P.O. Box 3151
	Houston, Texas 77253

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name:	<u>Derrick Vallance</u>	[Please type]
Title:	<u>Project Manager</u>	
Address:	<u>757 N. Eldridge, Houston, Texas</u>	77079
Tel. Number:	<u>(713) 870-7692</u>	

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Landfill Superfund Site.

C.W.P., Inc., Formerly
FOR Commercial Wire & Display Products Corp. COMPANY, INC. */

Date: August 19, 1992

Name	<u>William J. Simpson</u>
Title	Assistant Treasurer
Address	Three Mellon Bank Center
(Please type)	525 William Penn Place, Suite 3901
	Pittsburgh, PA 15219-1709

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name:	<u>Joel R. Burcat</u>	[Please type]
Title:	<u>Attorney</u>	
Address:	<u>Kirkpatrick & Lockhart, 240 N. Third St., Harrisburg. PA 17101-1503</u>	
Tel. Number:	<u>(717) 231-4500</u>	

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

FOR Chrysler Corporation COMPANY, INC. */

Date: August 26, 1992

Name
Title
Address
(Please type)

A. E. Micale
A. E. Micale
Assistant Secretary
12000 Chrysler Drive
Highland Park, MI 48288-1919

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: R. D. Houtman, Asst. Gen. Counsel & [Please type]
Title: Asst. Secretary - Chrysler Corporation
Address: 12000 Chrysler Drive, Highland Park, MI 48288-1919
Tel. Number: (313) 956-2845

*/ A separate signature page must be signed by each corporation, individual or other legal entity that is settling with the United States.

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Landfill Superfund Site.

FOR DEAN FOODS COMPANY, INC. */

Date: August 19, 1992

Name	<u>Eric A. Blanchard</u>
Title	Secretary and General Counsel
Address	3600 North River Road
(Please type)	Franklin Park, Illinois 60131

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name:	<u>Eric A. Blanchard</u>	[Please type]
Title:	<u>Secretary and General Counsel</u>	
Address:	<u>3600 N. River Road, Franklin Park, IL</u>	60131
Tel. Number:	<u>(312) 625-6200</u>	

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

FOR Textron Inc.

~~COMPANY, INC.~~

Date:

August 13, 1992

Name

Title

Address

(Please type)

Richard A. McWhirter

Senior Vice President and Secretary

40 Westminster Street

Providence, RI 02903

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Jamieson M. Schiff [Please type]

Title: Assistant Environmental Counsel

Address: 40 Westminster Street, Providence, RI 02903

Tel. Number: (401) 457-2422

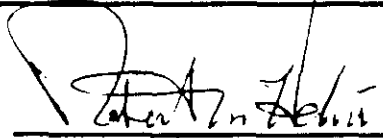
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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

FOR THE GOODYEAR TIRE & RUBBER COMPANY

Date: August 17, 1992

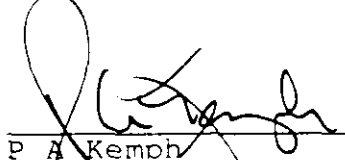
Name
Title
Address
(Please type)


R M Hehir
Vice President
The Goodyear Tire & Rubber Company
Akron, OH 44316

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Neal T Rountree [Please type]
Title: Attorney
Address: 1144 East Market Street, Akron, OH 44316
Tel. Number: (216) 796-3737

ATTEST:


P A Kempf
Assistant Secretary

*/ A separate signature page must be signed by each corporation, individual or other legal entity that is settling with the United States.

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

FOR THE KELLY-SPRINGFIELD TIRE COMPANY, ~~XINXXXXXX~~

Date:

August 19, 1992

Lee N. Fiedler

Name
Title
Address
(Please type)

LEE N. FIEDLER
PRESIDENT AND CEO
12501 WILLOW BROOK ROAD, S.E.
CUMBERLAND, MARYLAND 21502-2599

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: NEAL T. ROUNTREE, ATTORNEY [Please type]
Title: THE GOODYEAR TIRE & RUBBER CO.
Address: 1144 EAST MARKET STREET, AKRON, OH 44316-0001
Tel. Number: (216) 796-3737
Fax: (216) 796-8836

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

FOR Nipco Inc Manufacturing COMPANY, INC. */

Date: 8/17/92
Name _____
Title _____
Address _____
(Please type)

Susan A. Harnish
Susan A. Harnish
Controller/Asst. Treasurer
4950 Marlin Drive, Rockford, IL 61130

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: _____ [Please type]
Title: _____
Address: _____
Tel. Number: _____


*/ A separate signature page must be signed by each corporation, individual or other legal entity that is settling with the United States.

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

FOR Joseph Behr & Sons, Inc. COMPANY, INC. */

Date: 8/18/92

Name
Title
Address
(Please type)


Richard A. Behr
President
1100 Seminary Street
Rockford, IL 61104

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Leland R. Foecking [Please type]
Title: Assistant Treasurer
Address: 1100 Seminary St., Rockford, IL 61104
Tel. Number: 815/987-2610

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Landfill Superfund Site.

FOR Kaney Transportation, Inc. ~~COMPANY, INC.~~ */

Date: August 19, 1992



Name: Richard L. Bell

Chairman of the Board/Chief Executive Officer

Title: Chairman of the Board/Chief Executive Officer

Address: P.O. Box 39, Rockford, IL 61105

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Curtis D. Worden, Esq. [Please type]
Title: Attorney
Address: 124 N. Water St., Suite 300, Rockford, IL 61107
Tel. Number: (815) 968-7501

*/ A separate signature page must be signed by each corporation, individual or other legal entity that is settling with the United States.

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

FOR Kelsey-Hayes (Gunitite) COMPANY, INC. */

Date: August 18, 1992

Name	<u>Joseph F. McCarthy, Secretary</u>
Title	<u>Secretary</u>
Address	<u>38481 Huron River Drive</u>
(Please type)	<u>Romulus, MI 48174</u>

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name:	<u>L.F. Charla, Esq. Butzel Long</u>	[Please type]
Title:	<u>150 West Jefferson Suite 900</u>	
Address:	<u>Detroit Michigan 48226-4430</u>	
Tel. Number:	<u>(313) 225-7016</u>	

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

FOR Laidlaw Waste Systems, /~~COMPANY~~/ INC. */

Date:

August 26, 1992

Name
Title
Address
(Please type)

Fredric P. Andes
Fredric P. Andes, Esq.
Partner - Kirkland & Ellis
200 E. Randolph Drive
Chicago, Illinois 60601

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Fredric P. Andes, Esq. [Please type]
Title: Partner - Kirkland & Ellis
Address: 200 E. Randolph Drive, Chicago, IL
Tel. Number: (312) 861-2162

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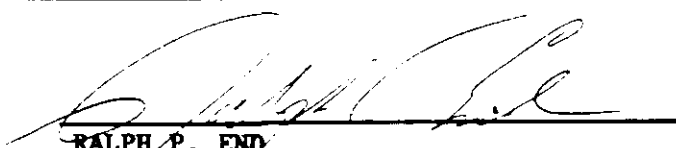
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FOR KEYSTONE CONSOLIDATED INDUSTRIES, ~~COMPANY~~ INC. */

Date:

August 18, 1992

Name
Title
Address
(Please type)


RALPH P. END
VICE PRESIDENT & GENERAL COUNSEL
5430 LBJ FREEWAY, SUITE 1440
DALLAS, TEXAS 75240

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: RALPH P. END [Please type]
Title: VICE PRESIDENT & GENERAL COUNSEL
Address: 5430 LBJ FREEWAY, SUITE 1440
Tel. Number: (214) 458-0028

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Landfill Superfund Site.

FOR Quality Metal Finishing Co. ~~COMPANY, INC.~~ */

Quality Metal Finishing Co.

Date: August 19, 1992

By: [Signature]

Name Mario Bortoli

Its President

Title President

Address 4th & Walnut Streets, Byron, IL 61010

(Please type)

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Curtis D. Worden, Esq. [Please type]
Title: Attorney
Address: 124 N. Water St. Suite 300, Rockford, IL 61107
Tel. Number: (815) 968-7501

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

FOR Borg-Warner Corporation ~~COMPANY, INC.~~

Date: August 17, 1992

Name

Title

Address

(Please type)


Neal F. Farrell

Executive Vice President - Administration

200 S. Michigan Ave., Chicago, Illinois 60604

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Tom Lupo, Esq. [Please type]

Title: Attorney

Address: Coffield Ungaretti & Harris, 3500 Three First National Plaza

Tel. Number: (312) 977-4400 Chicago, Illinois 60604

*/ A separate signature page must be signed by each corporation, individual or other legal entity that is settling with the United States.

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

Rockford Products Corp.
by its successor in interest
FOR RHI Holdings, Inc. COMPANY, --ING: */

Date: 8/19/92
Name
Title
Address
(Please type)

Donald E. Miller, V.P.
Donald E. Miller
Vice President
RHI Holdings, Inc.

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Donald E. Miller [Please type]
Title: Vice President
Address: RHI Holdings, Inc.
Tel. Number: 703-478-5800

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THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Winnebago Reclamation Service, Inc. et al, relating to the Pagel's Pit Superfund Site.

FOR The Testor Corporation

~~COMPANY, INC.~~

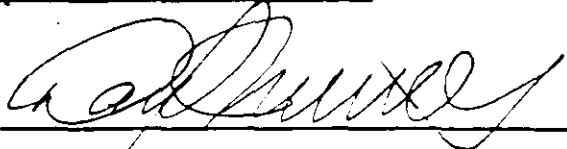
Date: September 11, 1992

Name

Title

Address

(Please type)


David Miller, President

620 Buckbee Street, Rockford, Illinois

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: David Miller [Please type]

Title: President

Address: 620 Buckbee Street, Rockford, IL

Tel. Number: (815) 962-6652

*/ A separate signature page must be signed by each corporation, individual or other legal entity that is settling with the United States.

APPENDIX A

Record of Decision

DECLARATION FOR THE RECORD OF DECISION

SITE NAME AND LOCATION

Pagel's Pit Site
Winnebago County, Illinois

STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedial action for the Pagel's Pit site in Winnebago County, Illinois, which was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) (hereinafter CERCLA), and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the administrative record file for this site.

Although the State of Illinois has agreed in principle that the remedy would address contamination at the site, it does not concur with this decision. The State has concerns over their possible loss of some control over the State permitted solid waste landfill.

ASSESSMENT OF THE SITE

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Record of Decision (ROD), may present an imminent and substantial endangerment to public health, welfare, or the environment.

DESCRIPTION OF THE SELECTED REMEDY

This remedy is the first of potentially two operable units at the site. It provides for interception of contaminated groundwater for the purpose of preventing it from leaving the site; use of contaminated groundwater as a water supply posed the risk identified at the site that exceeded criteria used by the United States Environmental Protection Agency (USEPA). It also addresses the wastes contained at this operating sanitary landfill. The groundwater will be treated, the wastes will be contained.

The second operable unit will address contaminated groundwater located primarily on the Pagel's Pit site in the southeast corner. The potentially responsible parties (PRPs) who have done the remedial investigation for the Pagel's Pit site contend that another National Priorities List site, upgradient of the

Pagel's Pit site, may contribute to this contamination.

The major components of the selected remedy include:

- a sanitary landfill cover for the waste disposal area;
- groundwater extraction along the west side of the site;
- on-site groundwater treatment by carbon adsorption or air stripping following pretreatment with a solids filter, with the treated water being discharged to surface water;
- removal of inorganics by treatment, if necessary, prior to carbon adsorption or air stripping;
- leachate extraction and transfer to the local publicly owned treatment works for treatment;
- gas extraction and the use of the gas for fuel or the flaring of the gas;
- deed restrictions; and
- site monitoring and maintenance of all remedial action components.

STATUTORY DETERMINATIONS

The selected remedy is protective of human health and the environment, complies with Federal and State requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost-effective. The remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, for this site. The large size of the landfill and the apparent lack of on-site hot spots representing major sources of contamination thwart use of the statutory preference for a remedy requiring permanent treatment as a principal element. A principal threat, which the Agency would expect to treat, has not been indicated. Instead, as discussed in 40 CFR 300.430(a)(1)(iii)(B), USEPA expects to use engineering controls, such as containment, for this operable unit because the wastes pose a relatively low-level, long-term threat and because permanent treatment of the entire landfill is impracticable.

Because this remedy will result in hazardous substances remaining on-site above health-based levels, a review will be conducted within five years after commencement of remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment.

6/28/91

Date



Valdas V. Adamkus
Regional Administrator
Region V

--Page 2--

**RECORD OF DECISION SUMMARY
PAGEL'S PIT SITE**

I. SITE LOCATION AND DESCRIPTION

The Pagel's Pit site (Winnebago Reclamation Landfill or WRL) occupies about 100 acres on the west side of Lindenwood Road, south of Baxter Road and about 5 miles south of Rockford, Illinois (see Figure 1). The landfill has been in operation since about 1972 and the operator has estimated that 5 to 7 years of capacity remain. Municipal refuse and sewage treatment plant sludge have been the primary wastes accepted at the site. Illinois special wastes (industrial process wastes, pollution control wastes, or hazardous wastes, except as determined pursuant to the Illinois Environmental Protection Act) have also been disposed of at the facility.

The site is located in a predominately rural unincorporated area. It is bounded on the west by Killbuck (or Kilbuck) Creek and on the east by Lindenwood Road. Killbuck Creek, a perennial stream, merges with the Kishwaukee River about 2.5 miles northwest of the site. The Kishwaukee River merges with the Rock River about 1.5 miles northwest of the confluence of Killbuck Creek and the Kishwaukee River. The site is located on a topographic high between Killbuck Creek to the west and unnamed intermittent streams to the north and the south. Land use around the site is a mix of agricultural, rural residential, commercial, and industrial.

The topography surrounding the landfill area is relatively flat to gently rolling. The ground surface elevation is approximately 706 feet mean sea level (MSL) at Killbuck Creek. The landfill lies outside of the 100-year floodplain of Killbuck Creek and is not within any designated wetland area. A small jurisdictional wetland area, rated low in quality because of its artificial nature, has been delineated south of the landfill. Although an inventory of terrestrial plant and animal species has not been performed, the site is not known to be inhabited by endangered or threatened species.

Access to that part of the site closest to Lindenwood Road is restricted by a chain link fence. Access to the rest of the site is restricted by other fencing and the topography, which includes steep slopes and heavily wooded areas.

The surficial unconsolidated deposits in the area of the site are predominantly glacial drift ranging from a thin mantle over the dolomite in the bedrock uplands to the east of the site to greater than 70 feet in the bedrock valley west of the site.

The unconsolidated deposits are predominantly sand and gravel underneath and north of the site with a silty clay to the south of the site. The underlying bedrock surface is highly variable. A bedrock map, based on available data, is shown in Figure 2. The dolomite bedrock is generally fractured but the intensity is variable. Chert layers or nodules were commonly noted on boring logs as were vugs (void spaces), but cavernous zones were not reported.

II. SITE HISTORY AND ENFORCEMENT ACTIVITIES

The landfill is located at a former sand and gravel quarry. It has been sequentially constructed and filled in several sections. Development has generally occurred in an east to west direction, first in the southern half and then in the northern half. The base of the landfill is now complete and the landfill wastes cover approximately 47 acres. The landfill liner was constructed by grading and compacting the base and side walls of the landfill. Asphaltic concrete was installed over the sides and floor and compacted, resulting in a two inch thick layer. The surface of the asphalt was sealed with a cationic coal tar sealer. This sealed asphalt liner was covered with eight inches of sand. A network of perforated pipes was installed in the sand on the sloping base. The pipes were connected to manholes in which the liquid that drains from the wastes (leachate) collects. The leachate is pumped from the manholes to a leachate pond located on top of the landfill. The leachate is aerated in the pond and periodically trucked to the wastewater treatment plant in Rockford.

Wastes to be disposed of in the landfill enter through the gate where there is a scale. The hauler takes the wastes to the working face of the landfill where they are unloaded. Since 1985, however, sewage sludge has first been taken to the on-site sludge drying plant where it is dried before being placed in the landfill. The operator at the working face compacts the wastes into the active section of the landfill. A six-inch cover is applied over the wastes daily; this generally consists of sand and clay with some gravel. When an area has been filled to an intermediate elevation (the area will not be receiving wastes for sixty days and the final permitted elevation has not been reached), a compacted layer of additional suitable material is placed on the surface. Much of the present landfill is covered with this intermediate cover. Further filling of the landfill is expected to bring the western end of the landfill to the elevation of the eastern part, which is at about 790 feet MSL. Then most of the surface will have additional wastes placed upon it and the final top grade of the central portion of the landfill will be brought to 820 feet MSL. At that time, the landfill will have reached its capacity, which is estimated at

about 6 million cubic yards of wastes; it has been estimated that the landfill contained about 4.7 million cubic yards of wastes in April 1990. The proper side slopes will be maintained with the final filling.

Around 1980, landfill gas, consisting primarily of methane and carbon dioxide, was discovered to be escaping from the landfill near Lindenwood Road. Five gas extraction wells were installed in the southeast corner of the landfill. A few months later, four additional wells were installed in the northeast corner. These wells were connected to a flare, where the gas was burned. In 1981, it was learned that landfill gas was still escaping to the northeast of the landfill. Following this determination, the gas extraction system's operation and maintenance were upgraded. In 1984, these wells were replaced by a network of 70 wells located in the eastern, non-active portion of the landfill. The gas is collected from the wells through the use of blowers and a system of header pipes and is used as a fuel source in the sludge drying operation. In November 1988, 21 additional wells were installed in the central section of the landfill and connected to the system. The gas extraction wells are also used for the removal of leachate from the landfill. When used for this purpose, a gas extraction well is disconnected from the system and a portable pump is placed in the well. The pump transfers the leachate to the leachate pond.

Because the nearby groundwater was found to be contaminated with arsenic, cadmium, and bis(2-ethylhexyl)phthalate, the site was proposed for inclusion on the U.S. Environmental Protection Agency's (USEPA's) National Priorities List (NPL) in October 1984. The NPL is the list of uncontrolled hazardous substance releases in the United States that are priorities for long-term remedial evaluation and response. The site was added to the NPL in June 1986.

The USEPA and several of the potentially responsible parties (PRPs) for this site reached agreement embodied in an Administrative Order by Consent, with an effective date of October 16, 1986. This Order requires the Respondents to conduct a remedial investigation (RI) and a feasibility study (FS) at the site. Portions of these studies were carried out by Warzyn Inc., and the reports for the RI and the FS for the work that has been done were submitted in March 1991. At least one additional study is planned.

The Acme Solvent Reclaiming, Inc. site (Acme Solvent site) is located east of the Pagel's Pit site (see Figure 1). The Acme Solvent site was proposed for the NPL in December 1982 and was placed on this list in September 1983.

III. COMMUNITY RELATIONS ACTIVITIES

Community relations activities for the Pagel's Pit site have been conducted for a number of years, at least since 1987 when several fact sheets were issued and the Community Relations Plan was released. In the early years, community relations for this site were combined with those for the Acme Solvent site.

A Proposed Plan was released to the public on April 16, 1991, which presented a number of alternatives as possible remedies for the problems that had been identified at the Pagel's Pit site and informed the public of USEPA's and IEPA's preferred remedy. It also informed the public that the reports for the RI and the FS and the other documents comprising the administrative record were available for review at the information repository located at the Rockford Public Library and at the offices of USEPA, Region V, in Chicago. The Administrative Record Index is included here as Appendix A. A public comment period was held from April 16, 1991 through May 16, 1991, and a public meeting was held on April 25, 1991. At this meeting representatives of USEPA and IEPA discussed the proposed alternatives for remediating the site, answered questions about the site and the problems there, and were prepared to receive verbal comments. A notice of the availability of the Proposed Plan and an announcement of the public comment period and the public meeting was published in the Rockford Sunday Register Star on April 14, 1991.

A response to the comments received during the comment period is contained in the Responsive Summary which is included as part of this Record of Decision as Appendix B.

IV. SCOPE AND ROLE OF RESPONSE ACTION

This Record of Decision addresses the first of potentially two response actions at the Pagel's Pit site. The selected remedial action that is described in this ROD addresses the wastes that have been disposed of at the site and the contaminated groundwater at the downgradient side of the site. This remedial action does not address the groundwater contamination that has been found in the southeast corner of the site.

The second response action at the site will address this southeast corner of the site. Further studies will be undertaken to address the contamination there.

No principal threat has been found at the site. The response action for this site includes containing low level threats. No documentation or physical evidence has been found to indicate the presence and approximate locations of hot spots.

V. SITE CHARACTERISTICS

During the remedial investigation for the Pagel's Pit site, the areas on and around both the Acme Solvent site and the Pagel's Pit site were studied. Additional monitoring wells were installed; groundwater from the shallow aquifer was sampled and analyzed at these wells and many of the other wells in the areas of the two sites; samples of leachate were analyzed; samples of water and sediments from Killbuck Creek were analyzed; and the air at the Pagel's Pit site was monitored. In addition, water levels in many of the groundwater wells were measured several times and permeability testing was performed at some of the monitoring wells. It should be noted that there are no monitoring wells that allow access to the groundwater directly beneath the wastes.

There were four rounds of groundwater sampling; the first two rounds consisted of samples from wells throughout the areas of the two sites and the last two rounds consisted of samples from the wells on or near the Pagel's Pit site. There were five rounds of leachate sampling. During the first three rounds of leachate sampling and the first two rounds of groundwater sampling, the samples were analyzed for volatile organic compounds (VOCs) by gas chromatography (GC) with ten percent of the samples being confirmed by gas chromatography/mass spectroscopy (GC/MS). Analytical difficulties (matrix interference) were observed with these leachate samples, so the final two rounds of leachate samples and the final two rounds of groundwater samples were analyzed by GC/MS. Samples were not analyzed for all parameters in all rounds.

The water table occurs in the fractured dolomite bedrock east of and below the eastern quarter of the Pagel's Pit site. Under the remaining three quarters of the site and west of the site, the water table occurs in the unconsolidated materials. Groundwater flow in the area of the two sites is generally from east to west in the upper aquifer. Beneath the northern portions of the site, groundwater flow is towards the northwest, while beneath the southern portions of the site, the groundwater flow is towards the southwest. North of the site, near Killbuck Creek, groundwater flow appears to be west to southwest towards the creek. South of the site, groundwater flow appears to be west to southwest towards the creek. A potentiometric map using data obtained in June 1988 (the time during which Round 2 groundwater samples were taken) is shown in Figure 3. The groundwater flow direction is perpendicular to a groundwater contour line. (The groundwater elevations in parentheses on this figure are generally for wells screened at elevations below the water table.)

Leachate samples from the Pagel's Pit site were found to contain relatively high levels of chloride ion. Chloride ion was selected by the remedial investigation contractor as an indicator of areas of groundwater that may have been affected by leachate from the landfill; chloride ion is generally recognized as a conservative, non-reactive parameter in groundwater systems. Based on the presence of elevated chloride ion concentrations in the groundwater, leachate from the landfill has been shown to be affecting the groundwater. Figure 4 shows the chloride results for Round 2 of groundwater sampling. Later sampling rounds showed generally similar results, but the chloride concentrations decreased in wells P1, P4R, and G116A and increased in wells P3R, G115, G110, and G114; see Table 1. As can be seen from the figure, the area found to contain elevated chloride ion concentrations extended from about midway along the north border of the landfill (east of well B15R), around the western end of the landfill, and along the south border of the landfill to at least the southwest area (well G115), and probably back into the southeast area of the site as well. Generally, the affected area was relatively close to the waste boundary, but a well on the other side of Killbuck Creek (well G116A) also exhibited elevated chloride concentrations. The depiction of the chloride concentrations with contour lines under the wastes is speculative since no sampling of the groundwater was done there; it is probable that the levels under the wastes do not decrease to the extent shown.

VOCs were found in the shallow aquifer on and in the vicinity of both sites. They were found both inside and outside of the area defined by elevated chloride concentrations. An example of the distribution of these VOCs is shown by the results for chlorinated ethenes, the dominant group of VOCs that were found in the area, for Round 2 of sampling for the Pagel's Pit study (Figure 5). The concentrations of chlorinated ethenes in wells on the Pagel's Pit site and near the waste boundary are shown in Table 1. Note that these chlorinated ethenes were found in a well (well G116A) on the west side of Killbuck Creek. Other groups of VOCs that were found in the groundwater were chlorinated ethanes, BETX (benzene, ethylbenzene, toluene, and xylenes), and 1,2-dichloropropane. The detection of VOCs from the easterly to the westerly direction was as follows: the VOCs detected at well B4, the well in this study with the highest contamination, included chlorinated ethenes, chlorinated ethanes, 1,2-dichloropropane, chloromethane, and BETX; the VOCs associated with wells near Lindenwood Road that are upgradient of the landfill with respect to the general groundwater flow, and not found at well B4, included chlorobenzene, trans-1,3-dichloropropane, and dibromochloromethane; the VOCs detected only in locations downgradient of the waste area included carbon tetrachloride, bromoform, chloroform, bromodichloromethane, and

acetone.

The investigation of the Pagel's Pit site and the recent investigations at the Acme Solvent site revealed that the highest concentrations of VOCs were found in several wells on and close to the Acme Solvent site. The next highest concentrations were found in several wells in the southeast corner of the Pagel's Pit site. However, a connection has not been established between the contamination on and near the Acme Solvent site and the contamination in the southeast corner of the Pagel's Pit site since wells between these two areas either contained no VOCs or contained VOCs at concentrations much lower than those in these two areas. Because a connection was not established with the contamination at the Acme Solvent site and because the southeast corner of the Pagel's Pit site is side-gradient of the waste area, USEPA has decided to treat that area of contamination separately from the rest of the groundwater contamination area. It will undergo further study before a remedial action is chosen to address the contamination there.

None of the dichlorobenzenes were found in well B4 during the first two rounds of sampling, when this well was sampled; no other analyses were done for semi-volatile organic compounds (SVOCs) in this well. The general group of SVOCs associated with wells near Lindenwood Road included 1,2-dichlorobenzene and 1,4-dichlorobenzene; however, all but two of the detections of the two dichlorobenzenes were in wells west of Lindenwood Road. The SVOCs generally detected only in wells downgradient of the waste area were bis(2-ethylhexyl)phthalate (there was one detection near the road), 1,3-dichlorobenzene, acenaphthene, and dibenzofuran. No pesticides or polychlorinated biphenyls (PCBs) were detected in any of the groundwater samples during this RI.

The leachate samples generally contained BETX compounds at higher concentrations than chlorinated compounds, whereas groundwater samples generally showed the opposite. Some SVOCs were detected in limited testing of leachate samples. Some PCBs and pesticides at low levels were also found in some leachate samples. Besides having higher than typical chloride concentrations, the leachate also had higher than typical sodium concentrations.

The groundwater which contained elevated chloride concentrations also tended to contain elevated sodium, potassium, magnesium, manganese, and iron. Other constituents sometimes associated with the same groundwater area included total phenolics, cyanide, arsenic, barium, cobalt, copper, lead, nickel, silver, vanadium, and zinc.

Generally, elevated levels of specific conductance and

alkalinity were found in the groundwater in the wells around the landfill. These wells included some that are nominally upgradient and sidegradient of the landfill, and some of these wells did not contain elevated levels of chloride ion. The increased conductivities indicate that some substances are being added to the groundwater from the landfill, even in the upgradient and sidegradient directions. Since conductivity depends on the presence of ions, among other things, an increase in the conductivity indicates an increase in the presence of inorganic acids, bases, or salts; molecules of organic compounds that do not dissociate in aqueous solution, and this is the case for many of the organics, do not contribute appreciably to the conductivity. Specific conductance data for Round 1 is shown in Figure 6. Specific conductance results are also presented in Table 1.

The shallow aquifer in the area of the two sites serves several nearby residences as a source of water. Five residences with contaminated groundwater, all located along Lindenwood Road, have been supplied with home carbon treatment units under a Consent Order with some of the Acme Solvent PRPs.

No upstream-downstream trends were noted in the results of the sampling of water and sediment from Killbuck Creek. This indicated that the Pagel's Pit site was not having an impact on the water quality there.

During air monitoring, fifteen VOCs were found to be present. However, the data was of limited value because sample holding times were exceeded. The total of the highest concentrations of each of these VOCs found at any location was below the National Ambient Air Quality Standards for hydrocarbons.

VI. SUMMARY OF SITE RISKS

A baseline risk assessment was performed which characterized the extent of contamination and determined the potentially exposed human and ecological population(s) sufficiently to evaluate which risks need to be prevented. The baseline risk assessment was composed of a human health evaluation and an endangerment assessment. The Risk Assessment Guidance for Superfund (RAGS) (USEPA, March 1989 and December 1989) was used in the preparation of the baseline risk assessment which has been reviewed by a regional toxicologist for consistency with guidance pursuant to OSWER Directive No. 9835.15.

The objective of the baseline risk assessment was to assess risks at the Pagel's Pit site regardless of the source(s) of the contamination. For the baseline risk assessment, sampling locations for groundwater west of Lindenwood Road were generally

considered to represent the Pagel's Pit site.

A. Human Health Risks

The human health evaluation was conducted to estimate the risks that people might incur as a result of exposure to contamination from or at the site. The risk assessment was made for both current and potential future site conditions.

Chemicals of potential concern were selected on the basis of the following criteria: a.) positively detected in at least one sample in a medium; b.) detected at levels significantly above the levels in blank samples; c.) detected at levels elevated above naturally occurring levels; d.) only tentatively identified, but which may be associated with the site; and e.) transformation products of chemicals demonstrated to be present. Those chemicals that met one of these five initial selection criteria were considered chemicals of potential concern. The exceptions to this were those chemicals detected in landfill leachate but not in other media and chemicals for which critical toxicity values had not been developed; these latter were evaluated qualitatively.

The chemicals of potential concern identified at the Pagel's Pit site were:

Volatile Organic Compounds

acetone
benzene
bromoform
bromodichloromethane
carbon tetrachloride
chlorobenzene
chloroethane
chloromethane
chloroform
dibromochloromethane
1,1-dichloroethane
1,2-dichloroethane
1,1-dichloroethene
1,2-dichloroethene (both)
1,2-dichloropropane
1,3-dichloropropene
ethylbenzene
methylene chloride
tetrachloroethene
1,1,2,2-tetrachloroethane
toluene
1,1,1-trichloroethane
trichloroethene
vinyl chloride

Semi-Volatile Compounds

bis(2-ethylhexyl)phthalate
di-n-butylphthalate
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene
diethylphthalate
PAHs (noncarcinogenic)

Metals/Inorganics

arsenic
barium
cadmium
chromium
cobalt
copper
iron
lead
manganese
nickel
nitrate & nitrite
silver
sodium
thallium
vanadium

xylenes (o-, m-, p-)

zinc
cyanide

Pesticides/PCBs

none

Note: PAHs are polynuclear aromatic hydrocarbons.

The Pagel's Pit site is an operating landfill that is expected to be closed in accordance with the regulations that apply to its operations. These regulations require a sanitary landfill cap for closure. It presently has a gas collection system and a leachate removal system, and these are to be operated and maintained after closure in accordance with the regulations. Access to the site is controlled. The primary problem identified for this site and which led to its inclusion on the NPL is possible contamination of the groundwater. Therefore, it has not been necessary to consider certain possible present and future exposure conditions. For example, since the landfill has yet to be finally covered (most of the surface is presently covered by an intermediate cover) and the landfill operations are similar to most operating landfills, consideration of present and future exposure to the soil on the landfill has not been done and this soil has not been tested for chemical contamination.

Under current land use conditions, only one potential exposure pathway was quantified. This was the exposure of children to contact with surface water and sediment and ingestion of sediment during recreation at Killbuck Creek. For the analysis, it was assumed that the children would be exposed once each week for eight months of the year for a period of 10 years. The exposure point concentrations for the surface water and sediments were determined from the lesser of either the 95 percent upper-bound confidence limit of the arithmetic mean or the maximum concentration detected for the four downstream sampling locations. Another pathway, the one arising from inhalation exposure to fugitive chemical emissions released to the air, was qualitatively addressed.

Under future land use conditions, the above two conditions apply in addition to possible exposure to the groundwater, through ingestion, inhalation, and dermal contact, from local wells downgradient of the site. This latter pathway results from the potential installation of new water supply wells near the site or the possible movement of the contaminated groundwater to private wells that exist downgradient of the site or may be installed there. This is not a current pathway because the closest private well (well FW1 which is about 0.4 miles southwest of the landfill) is not presently contaminated. For this analysis it was assumed that the residents would be exposed for 30 years on a daily basis. The exposure point

concentrations were determined from the lesser of either the 95 percent upper-bound confidence limit of the arithmetic mean or the maximum concentration detected. The groundwater data used for these concentration determinations were for the on-site and downgradient wells as well as well G112, which is just east of Lindenwood Road, except for wells B14 and PW1, which did not appear to be affected by artificial sources; this represents a total of 28 wells.

Exposure point concentrations are combined with estimates of media intake rates for the receptors in each exposure pathway to arrive at the receptor's intake. The media intake rates were generally based on USEPA procedures and suggested values.

The relationship between the level of chemical exposure and the magnitude of the toxic effect (dose-response relationship) for each chemical has been determined by applying critical toxicity values (e.g., reference doses (RfDs) and carcinogenic slope factors (SFs)) developed by USEPA. The toxicity values used have been obtained from the Integrated Risk Information System, the fourth quarter Health Effects Assessment Summary Tables (September 1990), or from the Environmental Criteria and Assessment Office (for interim values).

SFs have been developed for estimating excess lifetime cancer risks associated with exposure to potentially carcinogenic chemicals. The product of the SF and the estimated intake provides an upper-bound estimate of the excess lifetime cancer risk associated with exposure to a potential carcinogen at a particular intake level. The term "upper bound" reflects the conservative estimate of the risks calculated from the SFs. Use of this approach makes underestimation of the actual cancer risk highly unlikely. SFs are derived from the results of human epidemiological studies or chronic animal bioassays to which animal-to-human extrapolation and uncertainty factors are applied.

RfDs have been developed for indicating the potential for adverse health effects from exposure to chemicals exhibiting noncarcinogenic effects. A chronic RfD is an estimate of a lifetime daily exposure level for humans, including sensitive humans, that is likely to be without an appreciable risk of deleterious effects during a lifetime. Estimated intakes of chemicals from environmental media are compared to chronic RfDs. These RfDs are derived from human epidemiological studies or animal studies to which uncertainty factors are applied. These uncertainty factors help ensure that the RfDs will not underestimate the potential for adverse noncarcinogenic effects to occur.

Excess lifetime cancer risks (probabilities) are determined by multiplying the intake level by the cancer SF for each chemical of concern. An excess lifetime cancer risk of 1×10^{-6} for a specific chemical indicates that, as a plausible upper bound, an individual has a one in a one million chance of developing cancer as a result of site-related exposure to a carcinogen over a 70-year lifetime under the specific exposure conditions at a site.

Potential concern for noncarcinogenic effects of a single contaminant in a single medium is expressed as the hazard quotient (HQ), the ratio of the estimated intake to the RfD. Adding the HQs for all contaminants within a medium or across all media to which a given population may reasonably be exposed gives the hazard index (HI). The HI provides a useful reference point for gauging the potential significance of multiple contaminant exposures within a single medium or across media.

For current and future site conditions, exposure of children to chemicals in Killbuck Creek sediment and water was evaluated. The cumulative HI due to exposure to sediment via both incidental ingestion and dermal contact and to surface water by dermal contact was 0.01, based on reasonable maximum exposures to noncarcinogenic chemicals present. The cumulative cancer risk for the same pathway was calculated to be 6×10^{-7} based on reasonable maximum exposures to carcinogenic chemicals present. USEPA recommends that HQs and the HI should be less than one. USEPA recommends that remedies considered should reduce ambient chemical concentrations to levels associated with a carcinogenic risk range of 1×10^{-4} to 1×10^{-6} . Thus, for this pathway, noncarcinogenic health effects are not expected and cancer risks are low.

For current and future site conditions, the release of chemicals to air via volatilization was not considered a substantial route of exposure to humans. This was based mainly on a comparison of the ambient air data, which has limited usefulness, to safe exposure levels for workers. Also, the data did not indicate any increase in the levels of the chemicals downwind from those levels upwind.

For potential future site conditions, noncarcinogenic health effects may be of concern and cancer risks are substantially greater than the USEPA's suggested risk range when the groundwater at the site is considered as a water supply. The cumulative HI due to exposure to chemicals of potential concern in the groundwater was 5 based on reasonable maximum exposures to the noncarcinogenic chemicals present; thus, adverse health effects might be caused by exposure to the groundwater. The majority (84%) of the HI was associated with the potential

exposure to 1,2-dichloroethene (26%), arsenic (5%), barium (7%), manganese (7%), thallium (22%), and zinc (17%). (This HI does not include the contribution from cobalt, which would increase the HI to 100 if it were included. It has not been included because cobalt was detected infrequently (only at two wells in Round 1, and one of these samples was the duplicate) and because only an interim value oral RfD was available and it appeared to be unrealistically low.) The cumulative cancer risk for the same pathway was calculated to be 1×10^{-3} based on reasonable maximum exposures to carcinogenic chemicals present. The majority (91%) of the cancer health risk was associated with the potential exposure to vinyl chloride (74%) and arsenic (17%).

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this ROD, may present an imminent and substantial endangerment to public health, welfare, or the environment.

B. Environmental Risks

The environmental evaluation portion of the baseline risk assessment was done to characterize the natural habitats which may be influenced by the Pagel's Pit site and to estimate the actual or potential effects contaminants might have on these habitats. Killbuck Creek and the nearby wetlands were assumed to be the most sensitive ecological habitats near the landfill. Killbuck Creek is rated a "Class B Stream--Highly Valued Aquatic Resource".

Fish were considered the group of aquatic species that would be the most susceptible to chemical exposure in Killbuck Creek. Effects on fish are not expected based on the concentrations in the water in comparison to the Ambient Water Quality Criteria. Since this sensitive group of organisms appears to be safe from health effects, other aquatic ecosystem effects are not anticipated.

Health risks to the terrestrial environment could not be compared to applicable criteria because floodplain sediment and surface soil samples were not analyzed during the remedial investigation. Visual observations did not reveal any signs of impacts on the terrestrial ecosystem. Also, because of the nature of the contamination at the site (primarily in the groundwater), impacts on the terrestrial ecosystem would not be expected.

VII. DESCRIPTION OF ALTERNATIVES

A. Common Elements

Some components are common to several of the alternatives and these are described here. With all alternatives, it is planned that the landfill would continue to operate until it reaches capacity as long as the rate of filling does not fall below the level specified in this document. If it is decided to close the landfill early, then those components of the remedy that were to be implemented at final closure would be implemented at the time of actual closure. All future operations will be governed by applicable State permits and State regulations. The following alternatives have been evaluated:

- | | |
|-----------------------|---|
| Alternative 1 | No Action |
| Alternative 2 | Planned Closure |
| Alternative 3 | Clay-Synthetic Membrane Cap |
| Alternative 4 | Off-Site Treatment of Groundwater and Leachate |
| Alternatives 5 and 5a | On-Site Carbon Adsorption Treatment of Water |
| Alternatives 6 and 6a | On-Site Air Stripping of Water |
| Alternatives 7 and 7a | On-Site Photolysis/Oxidation Treatment of Water |
| Alternative 8 | In-Situ Landfill Waste Fixation |

Alternatives 2, 4, 5, 5a, 6, 6a, 7, and 7a include an Illinois sanitary landfill final cover system for the wastes that have been deposited at the site. This cover system would meet the recent regulations adopted by the State of Illinois. The cover would be constructed of a low permeability layer followed by a final protective layer. The low permeability layer would consist of a compacted earth layer at least 3 feet thick and would have a permeability that would be no greater than 10^{-7} cm/s. Any alternative to this cover would have at least the performance of this system. The protective layer would consist of soil capable of supporting vegetation, would be at least 3 feet thick, and would protect the low permeability layer from freezing. The final slopes of the cover system would be at a grade that would be capable of supporting vegetation and limiting erosion and would prevent accumulation of water on the cover. The cover would be maintained after installation.

In all of the alternatives except Alternatives 1 and 8, the current landfill gas extraction system would be upgraded. The newest 21 wells would probably be retained, but would be extended upward to accommodate the increased height of the landfill. The other extraction wells would be replaced with new wells, and additional new wells would be placed in the newer portions of the landfill. It is expected that the current system for handling the gas (for example, the blowers and the incinerator) would be able to handle the increased amounts of gas; if this would not be the case, additional handling capacity would be installed. Gas monitoring at selected perimeter

locations would be installed to detect gas migration from the landfill. The need for a perimeter gas recovery system would be evaluated, and it would be installed if necessary. Landfill gas would continue to be used as a fuel or it would be flared. It would be flared if the amount of gas exceeded that which could be used or if the gas were no longer needed for sludge drying or some other appropriate use.

Alternatives 4, 5, 5a, 6, 6a, 7, 7a, and 8 include a groundwater extraction system. The purpose of the system would be to prevent the migration of contaminated groundwater to the west from the waste disposal area. Groundwater would be extracted in a series of wells installed near the western boundary of the site. Further study of the contamination in the groundwater and the flow of the groundwater would be necessary in order to define both the vertical and horizontal extent of the groundwater contamination at the western boundary and beyond so that the extraction system designed would intercept the flow of contaminated groundwater and would recover the contaminated groundwater that exceeds the specified cleanup levels and that had already passed beyond the western boundary. The wells would be sized and spaced to capture the contaminated groundwater flowing from the vicinity of the waste disposal area. They would be operated in a manner that would lead to an efficient blocking operation. The line of extraction wells would stop the advance of the contaminated groundwater. It is expected that the groundwater extraction system would have to operate many years before the contamination in the groundwater at the site boundary would decrease to acceptable levels. At the present time, it is not possible to satisfactorily estimate this time period. The water taken from these wells would be disposed of in different ways in the various alternatives. The descriptions of the alternatives provide further details for this.

In Alternatives 3, 4, 5, 5a, 6, 6a, 7, and 7a, deed restrictions for property development and new well development on and adjacent to the landfill would be sought. Where restrictions on groundwater use because of the contamination from the Pagel's Pit site would result in an inadequate water supply, provisions would need to be made for an alternative water supply. Monitoring of groundwater, surface water, landfill gas, leachate, and the cover system would be carried out and all systems would be properly maintained.

B. Alternative 1: No Action

The Superfund program requires that the "no action" alternative be evaluated at every site to establish a baseline for comparison. Under this alternative, no further action would be taken at the site to address the problems that have been

identified.

At this site, this no action alternative could occur if the landfill suddenly shut down operations and failed to close as required by its permit. The leachate collection and gas management systems would no longer be operated. The contaminating of the groundwater would continue, and there would be no provisions for preventing future development on or very near the site. Funds derived from the financial assurance provisions of Winnebago Reclamation Service, Inc., the operator of the landfill, would be used to place a minimal cover on the landfill and possibly provide additional monitoring.

C. Alternative 2: Planned Closure

Under this alternative, the site would be properly closed when it reached capacity, or a decision was made by the operator to close it early. The Illinois sanitary landfill final cover system and the upgraded landfill gas extraction system described previously would be installed at the site. The leachate collection system would be operated, and the leachate would be sent to the local publicly owned treatment works (POTW) for treatment before being discharged, as is done now; pretreatment of the leachate by the current aeration system would continue with modifications as necessary to continue meeting the POTW's pretreatment requirements. The groundwater would be monitored. The site would be properly cared for according to the terms of its operating permit.

D. Alternative 3: Clay-Synthetic Membrane Cap

The wastes would be covered by a Resource Conservation and Recovery Act (RCRA) Subtitle C compliant hazardous waste cap that would reduce the infiltration of water into the wastes to very low levels and, therefore, reduce the amount of leachate. This cap might consist of two feet of compacted clay on top of the wastes, covered by a synthetic membrane, a sand drainage layer, a geotextile fabric, a soil layer (root zone), top soil, and grass.

The upgraded landfill gas extraction system described previously would be installed. The current leachate extraction system would be upgraded by installing permanent pumps in the manholes and selected gas extraction wells. The leachate would be sent to the local POTW by means of a sanitary service line connected to an existing sanitary sewer; pretreatment of the leachate by the current aeration system would continue with modifications as necessary to continue meeting the POTW's pretreatment requirements. The POTW would treat the leachate before final discharge.

Deed restrictions and monitoring and maintenance, as described in the common elements section, would apply.

E. Alternative 4: Off-Site Treatment of Groundwater and Leachate

In this alternative, contaminated groundwater and landfill leachate would be extracted and sent to the local POTW for treatment. The combined stream would be sent to the POTW by means of a sanitary service line connected to the sanitary sewer. The groundwater extraction system described previously would be used to extract the groundwater. The leachate would be extracted using the system described in Alternative 3.

The Illinois sanitary landfill final cover system and the upgraded landfill gas extraction system described previously would be constructed at the site. Deed restrictions and monitoring and maintenance, as described in the common elements section, would apply.

F. Alternatives 5 and 5a: On-Site Carbon Adsorption Treatment of Water

In Alternative 5, extracted groundwater would be treated on site to remove VOCs and semivolatile organic compounds (SVOCs) by carbon adsorption. The contaminated water would be pumped through two vessels containing the activated carbon, operated in series. Spent carbon would be shipped off site for regeneration or disposal. A solids filter would be used to pretreat the water going to the carbon adsorption vessels to remove suspended solids. The solids removed would be disposed of as their characteristics allow. Ion exchange or coagulation/flocculation would be added for removal of inorganics if this were determined to be necessary to meet discharge requirements or to prevent interference with the organic treatment process. Again, the solids would be disposed of as their characteristics allow. The treated water would be discharged to Killbuck Creek. The discharged water would be sampled periodically to ensure that discharge requirements were being met. The discharge requirements would be those for a National Pollutant Discharge Elimination System (NPDES) permit. The leachate would be transferred to the local POTW as described in Alternative 3.

In Alternative 5a, both the groundwater and the leachate would be treated on-site by carbon adsorption preceded by solids filtration. The leachate would be pretreated for removal of turbidity, solids, and inorganics by pH adjustment, precipitation, flocculation, and sedimentation and these solids would be disposed of as their characteristics allow.

Except for the treatment that replaces transfer to the local POTW, these two alternatives are the same as Alternative 4.

G. Alternatives 6 and 6a: On-Site Air Stripping of Water

Alternatives 6 and 6a are identical to Alternatives 5 and 5a, respectively, except that air stripping would be used in place of carbon adsorption. In addition to the air stripping, carbon polishing of the water leaving the air stripper would be included if it were determined to be necessary to meet discharge limits. The air stripping system would remove volatile contaminants from the groundwater by passing the water through a packed column through which air flows countercurrently to the water. The volatile contaminants in the water would be transferred to the air. It is expected that the air emissions from the column would be low enough that treatment of the vapors would not be required. However, the air emissions would be studied further during the design of the system, and if that study determined that controls would be necessary, controls would be added. This study would include modeling to predict air emissions from the site and might include further air monitoring studies since those done previously had limited value. The discharges from the air stripper would be subject to IEPA approval, could not exceed health-based levels (an excess cancer risk of 1×10^{-5} at the nearest residence or business), and would have to meet all federal and state requirements. All solids removed from the fluids being treated would be disposed of as their characteristics allow.

H. Alternatives 7 and 7a: On-site Photolysis/Oxidation of Groundwater

Alternatives 7 and 7a are identical to Alternatives 5 and 5a, respectively, except that photolysis and oxidation would be used in place of carbon adsorption. An ultraviolet photolysis process enhanced by the introduction of ozone or hydrogen peroxide would be used to oxidize the organic contaminants in the water. The treatment unit would consist of a tank with ultraviolet fixtures installed inside.

I. Alternative 8: In-situ Landfill Waste Fixation

In this alternative, the landfill wastes would be solidified in place (in-situ) by injection of a reagent slurry into the closed landfill. In this fixation process, the wastes are treated by boring into a landfill and adding the reagents. Each boring creates a column of treated material circular in cross section. The wastes are transformed into a stable, solidified mass by the process.

Groundwater would be extracted and treated on site by air stripping as in Alternative 6. There would be no cap with this alternative or gas or leachate extraction systems since these should not be necessary. Deed restrictions, as described in the common elements section, would be sought and groundwater monitoring and care of the site would be performed.

J. Costs

The estimated capital costs, costs for annual operation and maintenance (O&M), and total present net worth costs for the alternatives are given below:

<u>Alternative</u>	<u>Capital Costs</u>	<u>Annual O&M Costs</u>	<u>Present Worth</u>
1	0	0	0
2	\$ 5,170,000	\$149,000	\$ 7,500,000
3	10,850,000	147,000	13,100,000
4	5,850,000	293,000	10,400,000
5	6,240,000	310,000	11,000,000
5a	6,620,000	439,000	13,400,000
6	5,960,000	248,000	9,800,000
6a	6,400,000	296,000	11,000,000
7	6,360,000	327,000	11,400,000
7a	6,940,000	463,000	14,100,000
8	985,000,000	204,000	989,000,000

Note: Alternative 1 (No Action) has no specific capital costs. It has been assumed that there will be no periodic sampling and analysis.

K. Time Required for Implementation

The periods of time required to implement the various remedial actions are comparable. The cover system would be constructed after waste capacity had been reached or a decision to close early had been made. If, however, the rate of waste disposal fell significantly so that the time for closure would extend more than a few years (approximately three years) beyond the presently estimated years of remaining capacity, USEPA would order that closure be implemented before capacity had been reached. The cover system would be installed as the wastes would reach final elevations so that the beginning of the construction of the cover system would be well before final closure of the entire landfill would have to be accomplished. The landfill would be operated according to the terms of its permit and the rules of the State of Illinois during its remaining life. The cover system would be maintained as long as necessary. The fixation process would be implemented on much the same schedule as the final cover system.

The groundwater extraction system would be installed within an estimated two to three years after the decision was made in the

ROD that the extraction system would have to be installed. The length of time this system would have to operate cannot be estimated at this time. However, it would be operated at least until it was demonstrated to USEPA's satisfaction by the results of four quarters of monitoring that the concentrations in the groundwater beyond the extraction area were not exceeding the applicable standards and that the concentrations in the groundwater upgradient of the extraction area were not exceeding values that would, as shown by modeling, lead to an exceedance of the applicable standards in the downgradient groundwater. The system for handling the extracted groundwater would be left in a stand-by condition until at least the following five-year review or for three years, whichever is longer. However, monitoring of the groundwater would continue even beyond that time, and should monitoring indicate that the applicable standards were being exceeded, groundwater extraction would have to be reinstituted to control the contaminated groundwater.

The landfill gas extraction system would be operated until the waste has stabilized enough to no longer produce methane in quantities that exceed the minimum allowable concentrations stated in 35 IAC 811.311. The leachate management system would be operated until treatment would no longer be necessary according to the requirements of 35 IAC 811.309.

Since wastes are being left at the site, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) (hereinafter CERCLA) requires that a review of the remedial action selected be conducted at least every five years after the beginning of the remedial action. This will require that groundwater, leachate, and landfill gas monitoring be continued in order to furnish data for the reviews. With the no action alternative, this review would probably require some minimal amount of sampling and analysis of the groundwater and other media, but the costs for this sampling have not been included for this alternative.

VIII. SUMMARY OF COMPARATIVE ANALYSIS OF ALTERNATIVES

The National Contingency Plan (NCP) requires that an explanation be presented as to how the nine evaluation criteria were used to select the remedy. These criteria are categorized into three groups: threshold criteria (overall protection of human health and the environment and compliance with applicable or relevant and appropriate requirements (ARARs)); primary balancing criteria (long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost); and modifying criteria (state acceptance and community acceptance).

The NCP states that containment technologies will generally be appropriate remedies for wastes that pose a relatively low low-level threat or where treatment is impracticable. Containment has been identified as the most likely response action at municipal landfills because: municipal landfills are primarily composed of municipal, and to a lesser extent hazardous, wastes, and therefore, they often pose a low-level threat rather than a principal threat; and the volume and heterogeneity of waste within a municipal landfill often makes treatment impractical. As shown earlier in this document, the Pagel's Pit site is a municipal landfill.

A. Threshold Criteria

1. Overall Protection of Human Health and the Environment

All of the alternatives except Alternative 1 (No Action) and Alternative 2 (Planned Closure) and Alternative 3 (Clay-Synthetic Membrane Cap) provide adequate protection of human health and the environment. Alternatives 1, 2, and 3 do not include groundwater extraction and treatment and consequently do not protect against exposure to contaminated groundwater; Alternative 3 does include institutional controls as protection against exposure to contaminated groundwater in place of an active response measure. The groundwater would be remediated generally until maximum contaminant levels (MCLs) and non-zero maximum contaminant level goals (MCLGs) are reached, as appropriate. When necessary, a carcinogenic risk of 10^{-5} and a cumulative hazard index of one would be used. All of the alternatives except Alternative 1 provide adequate protection against contact with the wastes. All of the alternatives except Alternative 1 provide some protection against the release of contaminants from the landfill by means of gas and leachate extraction; however, Alternative 2 might not provide this protection for as long a period as the other alternatives.

2. Compliance with Applicable or Relevant and Appropriate Requirements

All alternatives except Alternatives 1, 2 and 3, and possibly Alternative 4, should be able to meet the identified ARARs. Alternatives 1, 2, and 3 leave contaminated groundwater in place and do not provide means for preventing its movement away from the site. MCLs and MCLGs set under the Safe Drinking Water Act (SDWA) and National Pollutant Discharge Elimination System (NPDES) limits set under the Clean Water Act (CWA) are ARARs for this site. Alternatives 1, 2, and 3 would not meet the MCLs and non-zero MCLGs in the aquifer, but the groundwater extraction system with the other alternatives would be operated to meet

these requirements or more stringent requirements presented below. On-site treatment units for either groundwater or leachate would meet the NPDES requirements for discharge of the treated water to surface water. If RCRA wastes have contaminated the groundwater at the Pagel's Pit site, then RCRA ARARs may apply to the remediation of the groundwater. This would mean that any residue from the treatment of this groundwater would be a listed waste under RCRA and would have to be treated accordingly. The on-site treatment of the groundwater would be able to meet these ARARs, but these ARARs might make it impossible to send the groundwater to the local POTW for treatment (Alternative 4). The sanitary landfill cover designed to meet the requirements of the applicable Illinois regulations for solid waste landfills would meet the identified ARARs. The exact quantity of RCRA hazardous wastes that may be present in the landfill is not ascertainable. The bulk of the wastes disposed of at the site were household wastes. While consideration of a RCRA Subtitle C cap is relevant, requiring the installation of such a cap would not be appropriate in view of the predominance of solid wastes and lack of evidence of a RCRA hazardous waste problem within the landfill. The RCRA land disposal regulations are not relevant to the selected remedy as no wastes are required to be excavated and disposed of.

B. Primary Balancing Criteria

1. Long-term Effectiveness and Permanence

Alternative 8 could provide the highest degree of long-term effectiveness and permanence because the fixation process could greatly reduce the mobility of the contaminants in the wastes. However, this is a relatively new technology and testing would be required to determine its effectiveness at this site, particularly whether it would fix all of the material in the landfill. The final landfill cover systems included with all alternatives except Alternatives 1 and 8 provide long-term effectiveness with proper maintenance. The covers reduce the mobility of the contaminants by covering the wastes and reducing water infiltration. The covers provide protection against contact with wastes and contaminated soils. Groundwater extraction and treatment provide long-term effectiveness by removing contaminants from the groundwater and preventing the spread of this contamination. Air stripping and carbon adsorption are processes that have been proven to be generally reliable. Management of the landfill gas and leachate provides long-term effectiveness by reducing the migration of contaminants to the groundwater. Since wastes will remain at the site in all of the alternatives, five-year reviews of the protectiveness of the remedy will be required.

2. Reduction of Toxicity, Mobility, or Volume (TMV) Through Treatment

Alternatives 4, 5, 5a, 6, 6a, 7, 7a, and 8 provide extraction and treatment of the groundwater. This will reduce the mobility and volume of the contaminants. Carbon adsorption may reduce the toxicity of the contaminants in the groundwater if these contaminants are destroyed during carbon regeneration. Alternative 7 reduces toxicity by oxidizing VOCs and SVOCs that are present in the groundwater. Treatment of leachate at the POTW reduces toxicity by destroying some of the VOCs and SVOCs. Burning landfill gas reduces its toxicity. Extraction of leachate and gas from the landfill for treatment reduces their mobility. The fixation of the wastes in Alternative 8 may greatly reduce mobility, but testing would have to be done to determine if this would be the case.

3. Short-term Effectiveness

The groundwater extraction in Alternatives 4 through 8 prevents the migration of contaminated groundwater and provides the greatest short-term effectiveness. There is the possibility of a slight impact on local residents from the air stripper emissions in Alternatives 6 and 6a. This would be managed by means of emissions controls, if necessary. Handling of the exhausted carbon in Alternatives 5 and 5a and the wastes from the pretreatment units in Alternatives 5, 5a, 6, 6a, 7, and 7a may present some slight risks to the workers and to others when wastes from these processes are hauled off site for proper disposal. The amount of wastes to be handled would be expected to be greater in the alternatives that are also treating leachate on-site. Installation of the groundwater extraction wells and gas extraction wells and modification of the leachate extraction system might present some risks to the workers. There are some possibilities of risks to residents and workers if the sanitary service line or sanitary sewer being used to transport leachate and contaminated groundwater were to leak. The extraction of gas and leachate from the wastes provides added protection against spreading of contamination. The waste fixation system in Alternative 8 might pose some risks for the workers and the local residents during its implementation since the wastes must be penetrated.

In each of the alternatives involving application of a final cover system and in the alternative involving the fixation process, the landfill would continue to operate until it is full. This should not expose the workers or local residents to excess risks. The present operation of the landfill includes leachate and gas extraction, and the areas of the landfill that are not currently being filled have an intermediate cover that

prevents contact with the wastes. The principal risk identified would be addressed within a short period of time if the groundwater extraction system was installed and operated as soon as possible after the selection of the remedy. This would result in control of the migration of contaminated groundwater. Such control would not be present in the cases of Alternatives 1, 2, and 3.

4. Implementability

Among the alternatives requiring active remedies, Alternatives 2 and 3 would be the simplest to implement. All of the alternatives should be fairly easy to implement except for the fixation process of Alternative 8. A possible future implementation problem might arise in the alternatives in which leachate is sent to the POTW if changes in the content of the leachate occur or regulations regarding waste streams that can be sent to a POTW change. Alternatives 5, 5a, 6, 6a, 7 and 7a require that NPDES requirements be met for discharge of the treated water to Killbuck Creek. There should be no problem meeting these requirements. Alternatives 6 and 6a require that IEPA air requirements be met, which should pose no problem; these alternatives would have to meet all federal and state requirements related to air discharges. The photolysis/oxidation process and the fixation process are fairly new and would have to be tested before they could be implemented. The air stripping and the carbon adsorption processes are well established and should present few technical problems that have not arisen and been solved elsewhere.

5. Cost

The costs of the various alternatives have been presented in Section VII.J. Alternatives 4, 5, 6, 6a, and 7 all cost about the same (from \$9,800,000 to \$11,400,000 for the present net worth costs). Alternative 1 has essentially no costs associated with it. Alternative 8 is much more than an order of magnitude more expensive than the other alternatives (\$989,000,000 for the present net worth cost).

C. Modifying Criteria

1. State Acceptance

IEPA has been involved with the investigations at the Pagel's Pit site throughout the RI/FS process. The State will not concur on this Record of Decision, however. They agree in principle that the selected remedy will address contamination at the site. However, they believe that they will not have the necessary approval rights over the landfill closure and post-

closure activities when implementation occurs because they will not be a party to any settlement that is negotiated. The letter stating their position is in Appendix C.

2. Community Acceptance

Community acceptance of the selected remedy is discussed in the Responsiveness Summary (Appendix B).

IX. SELECTED REMEDY

Based on the comparative analysis of the alternatives, which is summarized above, and the information obtained from the remedial investigation and the feasibility study, USEPA and IEPA have selected either Alternative 5 or Alternative 6 as the most appropriate remedial action for the Pagel's Pit site. The two remedies are very similar, differing only in the manner in which the extracted groundwater is treated at the site. The actual selection of the treatment system to be used will be made during the design of the system. Permitting the choice to be made at that time will allow the selection of the most appropriate system for the task to be performed by allowing for additional information to be used in the decision. The selection will be made using good engineering practice. The treatment system that best meets the removal requirements in a cost effective manner will be chosen. The effectiveness of the carbon adsorption system in removing the contaminants of most concern (for example, single chain chlorinated compounds are not easily adsorbed), the possible inability to remove the more nonvolatile contaminants to the required degree in an air stripper, and the ability of activated carbon to remove some inorganics are some of the items that will have to be considered in the selection. Because of the presence of vinyl chloride in the groundwater, at this time it appears likely that Alternative 6 will be used.

Alternative 5 includes a sanitary landfill cover for the waste disposal area; groundwater extraction along the west side of the site; on-site groundwater treatment by carbon adsorption following pretreatment with a solids filter and treatment for removal of inorganics, if necessary, with the treated water being discharged to Killbuck Creek; leachate extraction and transfer to the local POTW for treatment; gas extraction and use of the gas for fuel or the flaring of the gas; and deed restrictions. Alternative 6 is the same except that air stripping, possibly followed by carbon polishing, is used in place of carbon adsorption. The cost estimates for these two alternatives are presented in Table 2.

As a reminder, the remedial action being selected here does not address the groundwater contamination that was found in the

southeast corner of the site; that contamination will be addressed after additional studies have been conducted.

The sanitary landfill cover has been described in Section VII.A. It will meet the requirements presented in 35 IAC Part 811. However, if, during the period that the landfill continues to operate, the State issues new regulations for landfills of this type that contain requirements for a more protective cap than the one specified here, and these regulations apply to this landfill, then the new cap shall be used. The cap will be installed according to the schedule given in Section VII.K and it will be maintained.

During the remaining years of operation, the landfill will be operated according to the terms of its permit(s) and the regulations of the State of Illinois. This applies to the continuation of present practices and to any future operating practices that may be required, such as the control of runoff from the site. Section 121(e)(1) of CERCLA states that, "No Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with this section." During the continued operation of the landfill, the operator will have to develop and operate the site in compliance with all applicable laws and will have to obtain various permits from time to time, when these laws require them. The continued operation of the landfill, involving the placement of wastes in the landfill and the operations associated with this, are not part of the remedial action. Only those actions that are part of the final remedy selected in this ROD and that are conducted entirely on-site are exempt from having permits. Placement of the final cover system and modification of the leachate and gas extraction systems are some of the actions that do not require permits because they are part of the implementation of the final remedy. Placement of wastes, operation of the leachate and gas extraction systems prior to final cover placement, and groundwater monitoring required of an operating landfill are some of the activities that will need permits if they are required by Federal, State, or local authorities because they are part of the day-to-day operations of an operating landfill. Conditions of the current IEPA operating permit must be satisfied.

The groundwater extraction system has been described in Section VII.A. The duration of operation and the conditions under which its operation can be discontinued are discussed in Section VII.K. This system will be installed and operated to prevent the migration of contaminated groundwater from the western edge of the site and to remove any contaminated groundwater that exceeds the levels specified below and that has passed beyond

the western boundary. This will necessitate the full determination of the extent of the contaminated groundwater along that boundary. This extraction system will be operated to maintain the concentrations of contaminants in the groundwater downgradient of the line of wells below the specified levels.

These specified levels are MCLs or non-zero MCLGs, except that a cumulative carcinogenic risk of 1×10^{-5} and a cumulative HI of 1.0 will be used for 1,1-dichloroethene, arsenic, and those contaminants without MCLs; groundwater cleanup standards below detection limits using USEPA approved methods for analysis of drinking water may be modified. MCLs and the 1×10^{-5} risk level have been selected because concentrations in the neighborhood of a 1×10^{-6} risk are often below reasonably achievable detection levels.

This aquifer has been classified as a Class II aquifer under the USEPA's Groundwater Protection Strategy and is widely used as a source of drinking water. The proposed containment of contaminated groundwater is consistent with USEPA's goal of returning usable aquifers to their beneficial use.

The groundwater along the sides and the upgradient boundary of the waste disposal area will be monitored to ensure that contamination is not leaving the site in directions other than along the western boundary.

In Alternative 5 (see Section VII.F), the extracted groundwater will be treated on-site by carbon adsorption to remove VOCs and SVOCs. Extracted groundwater (estimated at roughly 100 gpm from about 6 recovery wells) is first routed to a pretreatment process consisting of a solids filter where the particulate concentration is reduced to an acceptable level. The water then goes to a two-vessel granular carbon adsorption system operating in a series mode. Spent carbon will be transported off-site for thermal regeneration at an approved regeneration facility. Because of the presence of chlorinated compounds, some of which are not easily adsorbed, it may be necessary to add a pretreatment step for their partial removal in order to reduce carbon usage rates. Other treatment, such as coagulation/flocculation or ion exchange, may be used for removal of inorganics if needed to meet discharge requirements or prevent interference with the organics treatment process. These additional treatment steps have not been included in the cost estimate. The treated water (effluent) will be discharged to Killbuck Creek and will be monitored periodically. All solid waste products will be disposed of as their characteristics allow.

In Alternative 6 (see Section VII.G), the extracted groundwater

will be treated on-site by air stripping to remove volatile contaminants. The extracted groundwater first flows through a solids filter and then flows downward through the stripping column. Air blowers will provide counter-current air for stripping of the volatile contaminants. Air emissions from the column are expected to be low enough that treatment will not be required. The discharges from the air stripper will be subject to the approval of IEPA, will not be allowed to exceed health-based levels, and will have to meet all federal and state requirements. Carbon polishing of the water effluent from the stripper and treatment for removal of inorganics will be added to the treatment system if they are needed; they have not been included in the cost estimate. The treated water will be discharged to Killbuck Creek and will be monitored periodically. All solid waste products will be disposed of as their characteristics allow.

The current leachate collection system will be upgraded by installing dedicated pumps in some of the gas extraction wells. The manholes connected to the perforated pipe for leachate collection will be equipped with dedicated pumps. These pumps will be equipped with automatic level switches that will keep the level of leachate no more than one foot above the bottom of the manhole or well. The extracted leachate will be pretreated at the site by the current aeration system; the pretreatment system will be modified as necessary in order to continue to meet the POTW's pretreatment requirements. The extracted leachate will be sent to the POTW for treatment and disposal via a sanitary service line connected to an existing sanitary sewer. The leachate management system will be operated for the length of time specified in Section VII.K.

The gas extraction system will be modified as described in Section VII.A. It will be operated for the length of time specified in Section VII.K. It will be operated so that the standards in 35 IAC 811.311 will not be exceeded.

Institutional controls may be employed. Deed restrictions limiting the development of the property and the placement of new wells on the property and adjacent to the site may be sought voluntarily from owners or compelled to the extent authorized under any applicable local and state laws. If any property with groundwater contamination that is attributable to the Pagel's Pit site requires an alternate water supply, an alternate water supply will be provided. The groundwater, surface water, landfill gas, leachate, and landfill cap will be monitored. The cover system, the gas and leachate extraction, handling, and disposal systems, the groundwater extraction, treatment, and disposal systems, and any other systems installed as part of the remedial action will be properly operated and maintained.

There has been a proposal that a new landfill be constructed on land immediately south of the Pagel's Pit site. This proposal includes the future placing of wastes in the space between the two landfills once the new landfill to the south has been filled. It is further proposed that additional wastes be placed on top of both landfills to a specified elevation. This placement of wastes on the top of the Pagel's Pit site is not part of the wastes that have been mentioned previously which will be placed to reach the presently permitted elevations and capacity. When the presently permitted capacity has been reached, the final cover system will be installed.

Whether additional wastes will be placed on the Pagel's Pit site at the time the south landfill reaches capacity will be reviewed as part of the five-year review process. The deed restrictions for property development will include a prohibition on the use of the land covered by the cover system for any future development that might interfere with the effectiveness of the cover system unless such use is approved by USEPA; this would include the construction of a landfill or the placement of wastes. Construction of a landfill on top of the closed landfill (Pagel's Pit) will require approval of USEPA and the permitting authorities.

X. STATUTORY DETERMINATIONS

The Proposed Plan for the Pagel's Pit site was released for public comment in April 1991. The Proposed Plan identified Alternatives 5 and 6 as the preferred alternatives. USEPA reviewed all written comments received (no oral comments were received) during the comment period. Upon review of these comments, it was determined that no significant changes to the remedy, as it was originally identified in the Proposed Plan, were necessary.

A. Protection of Human Health and the Environment

The baseline risk assessment performed for the Pagel's Pit site identified one exposure scenario that resulted in noncarcinogenic health effects that may be of concern and cancer risks that are substantially greater than the USEPA's suggested risk range. This scenario was for the use of the contaminated groundwater at the site as a water supply, and the exposures were due to ingestion of and dermal contact with the water and inhalation of vapors that might arise from the water. These risks are addressed by the selected remedy by extracting the contaminated groundwater before it leaves the site and treating it before discharging it to surface water. This groundwater extraction system will be operated until groundwater leaving the site will result in a cancer risk of no more than 1×10^{-5} and a HI

of no more than 1.0 or the contaminant concentration will be less than the MCL (modified in the case of some contaminants).

Since it was known that it was necessary to install a landfill cover system over the wastes, no sampling of the surface soils was done and no risk assessment for exposure to these soils was performed. The landfill cover system and gas and leachate extraction systems will provide the required protection from the wastes that are being left in place.

Use of air emissions controls on the air stripper, if they are required, will protect against exposures during the remedial action. Discharges of treated water to Killbuck Creek will be regulated by the NPDES requirements, which will ensure that the remedial action does not adversely affect the stream.

Based on the present levels of contaminants detected in the aquatic ecosystem, ecological effects are not expected. Based on the fact that the groundwater is the main means by which contamination is transported, terrestrial ecosystem effects are not expected.

B. Compliance with Applicable or Relevant and Appropriate Requirements

Either of the selected remedies will meet all identified applicable or relevant and appropriate requirements, both Federal and State. The following ARARs have been identified.

Chemical specific

- SDWA national primary drinking water standards (40 Code of Federal Regulations (CFR) 141)
- Clean Air Act (CAA) national ambient air quality standards (NAAQS) (40 CFR 50)
- CAA national emission standards for hazardous air pollutants (NESHAPs) (40 CFR 61)
- Illinois water quality standards (35 Illinois Administrative Code (IAC) 302)
- Illinois general effluent standards (35 IAC 304)
- Illinois sewer discharge criteria (35 IAC 307)
- Illinois air quality standards (35 IAC 243)

Action specific

- CWA NPDES administered permit programs (40 CFR 122)
- CWA NPDES standards (40 CFR 125)
- CWA pretreatment standards (40 CFR 403)
- RCRA definition and identification of hazardous waste (40 CFR 261)
- RCRA standards for generators of hazardous waste (40 CFR 262)

- RCRA standards for transport of hazardous waste (40 CFR 263)
- Occupational Safety and Health Act (OSHA) general industry standards (29 CFR 1910)
- OSHA safety and health standards for construction (29 CFR 1926)
- Department of Transportation (DOT) rules for transportation of hazardous materials (49 CFR 107, 171)
- Illinois regulations for solid waste (35 Part 807)
- Illinois regulations for special waste hauling (35 IAC 809)
- Illinois regulations for solid waste disposal (35 IAC 810)
- Illinois standards for new solid waste landfills (35 IAC 811)
- Illinois regulations for permit application (35 IAC 812)
- Illinois procedural requirements for permitted landfills (35 IAC 813)
- Illinois standards for existing landfills and units (35 IAC 814)
- Illinois procedural requirements for exempt landfills (35 IAC 815)
- Illinois waste disposal regulations (35 IAC 700, 702, 703, 705, 720, 721, 722, 723, 724)
- Illinois landfill regulations (35 IAC 729)
- Illinois regulations for prohibition of air pollution (35 IAC 201)
- Illinois regulations for emissions of fugitive and particulate matter (35 IAC 212)
- Illinois organic air emission standards (35 IAC 215)
- Illinois NPDES permit regulations (35 IAC 309)
- Illinois pretreatment programs (35 IAC 310)
- Illinois treatment plant operator plant certification (35 IAC 312)
- Illinois recommended standards for sewer works (35 IAC 370)
- Illinois regulations for major stationary sources construction and modification (35 IAC 203)
- Illinois sulfur limitations (35 IAC 214)
- Illinois carbon monoxide emissions for incinerators (35 IAC 216)
- Illinois nitrogen oxide emissions, fuel combustion (35 IAC 217)
- Illinois sound emission standards and limitations (35 IAC 901)

Location specific

- National Environmental Policy Act, wetlands and floodplains and fish and wildlife (40 CFR 6)
- Illinois floodplains construction permits (Ill. Revised Statutes, Chapter 19, Paragraph 65(f))

To Be Considered Criteria

- SDWA maximum contaminant level goals (40 CFR 141.50)
- CWA proposed sludge disposal criteria and state sludge programs (40 CFR 258, 501, and 503)

C. Cost-Effectiveness

The lowest cost alternative involving some remedial action is Alternative 2, Planned Closure, at \$7,500,000 for the total net present worth. This cost approximately represents the cost for the normal closure of the landfill and, therefore, represents a base cost for the remedial action. This alternative does not provide a means for stopping the movement of the contaminated groundwater from the site. The total net present worth for Alternative 6, \$9,800,000, is the least costly alternative that provides a barrier to the migration of the contaminated groundwater, something which the remedial action must provide. Alternative 5, with a total net present worth of \$11,000,000, is slightly more costly, based upon the assumptions made in the cost estimates, but it might be found during the design to provide some advantages in the treatment of the water. Thus, either alternative is cost effective for providing the protection that is required at the site. No benefit was apparent in treating the leachate on site rather than at the POTW in view of the increased cost. The leachate has been going to the POTW for a number of years, and no adverse effects from this practice have been demonstrated. Treating the groundwater at the POTW has the disadvantage of sending a water to the plant that contains low levels of contamination; the POTW does not allow such materials as stormwater, groundwater, and surface drainage to be sent to the POTW.

D. Utilization of Permanent Solutions and Alternative Treatment (or Resource Recovery) Technologies to the Maximum Extent Practicable (MEP)

USEPA and IEPA believe that the alternatives selected represent the maximum extent to which permanent solutions and treatment technologies can be utilized in a cost-effective manner. The selected alternatives provide the best balance of long-term effectiveness and permanence, reduction of TMV through treatment, short term effectiveness, implementability, and cost, taking into account the statutory preference for treatment as a principal element as well as state and community acceptance.

E. Preference for Treatment as a Principal Element

This site is a sanitary landfill, and it is generally recognized that containment will be the main method of addressing the wastes, which pose only relatively low, long-term threats to human health and the environment.

Treatment on-site is being used to address the contaminated groundwater, which represents the greatest identified health risk. Leachate will be sent to the POTW for treatment. Landfill gas will be burned on-site.

This remedy does not satisfy the statutory preference for treatment as a principal element of the remedy. The size of the landfill and the fact that no on-site hot spots representing major sources of contamination have been located preclude a remedy in which contaminants could be excavated and treated effectively. No principal threat has been identified at the site.

Table 1

Selected Groundwater Results, Four Rounds of Sampling												
Well	Chlorinated Ethenes, ug/l				Chloride Ion, mg/l				Specific Conductance, umho/cm			
B15	0.6	3.0	--	--	609.	860.	--	--	4390	5620	--	--
B15P	17.3	15.2	15.0	18.0	14.	15.	13.	10.	660	630	585	610
B15R	22.8	19.8	6.6	10.0	477.	348.	529.	459.	4130	3300	3840	3365
P1	12.0	21.6	7.0	9.0	252.	176.	65.	80.	2200	1610	1220	1255
HW106	18.9	21.2	--	--	430.	378.	--	--	3310	2980	--	--
P3R	16.2	12.1	6.0	7.0	47.	46.	72.	77.	1010	1090	535	1240
P4R	53.9	47.1	30.0	30.0	149.	188.	25.	28.	1380	1360	680	790
G116	0.0	0.0	0.0	0.0	7.	7.	7.	7.	530	625	645	645
G116A	12.3	27.5	12.0	22.0	41.	99.	39.	38.	780	1030	875	950
G115	21.4	23.0	1.0	8.0	40.	48.	178.	191.	1510	1410	1620	1840
B13	243.	268.	219.	215.	28.	32.	33.	34.	1180	1400	1260	1220
P6	89.2	164.	51.0	80.0	16.	18.	16.	20.	640	665	615	655
G110	23.0	127.	8.0	25.6	166.	234.	379.	523.	1420	1820	2380	3590
G114	14.8	11.6	3.0	1.0	42.	44.	176.	134.	1550	1540	2080	1910
B12	137.	116.	--	--	22.	25.	--	--	1550	1510	--	--
G109	24.1	18.6	33.0	4.0	28.	27.	20.	10.	1410	1390	1470	1260
G109A	99.0	115.	107.	73.0	62.	60.	73.	70.	1640	1520	1590	1450
G113	34.4	24.0	--	--	30.	29.	--	--	1680	1620	--	--
G113A	310.	534.	--	--	30.	28.	--	--	1430	1480	--	--

Selected Groundwater Results, Four Rounds of Sampling												
Well	Chlorinated Ethenes, ug/l				Chloride Ion, mg/l				Specific Conductance, umho/cm			
G111	--	57.1	59.0	50.0	--	22.	22.	26.	--	670	755	685
B14	0.0	0.0	--	--	10.	12.	--	--	630	660	--	--
G107	2.2	10.2	--	--	20.	16.	--	--	690	620	--	--
G118R	--	0.0	--	--	--	33.	--	--	--	730	--	--
G118A	0.2	0.0	--	--	12.	14.	--	--	410	617	--	--
G117	0.0	0.0	--	--	28.	26.	--	--	780	770	--	--
B10	23.6	27.7	--	--	15.	17.	--	--	1230	815	--	--
G108	27.7	16.0	--	--	9.	11.	--	--	1010	1080	--	--
B11	1.1	0.8	--	--	5.	6.	--	--	680	760	--	--
B11A	14.1	16.4	--	--	9.	11.	--	--	840	840	--	--
G112	1.1	1.0	--	--	29.	34.	--	--	1310	1430	--	--

Notes:

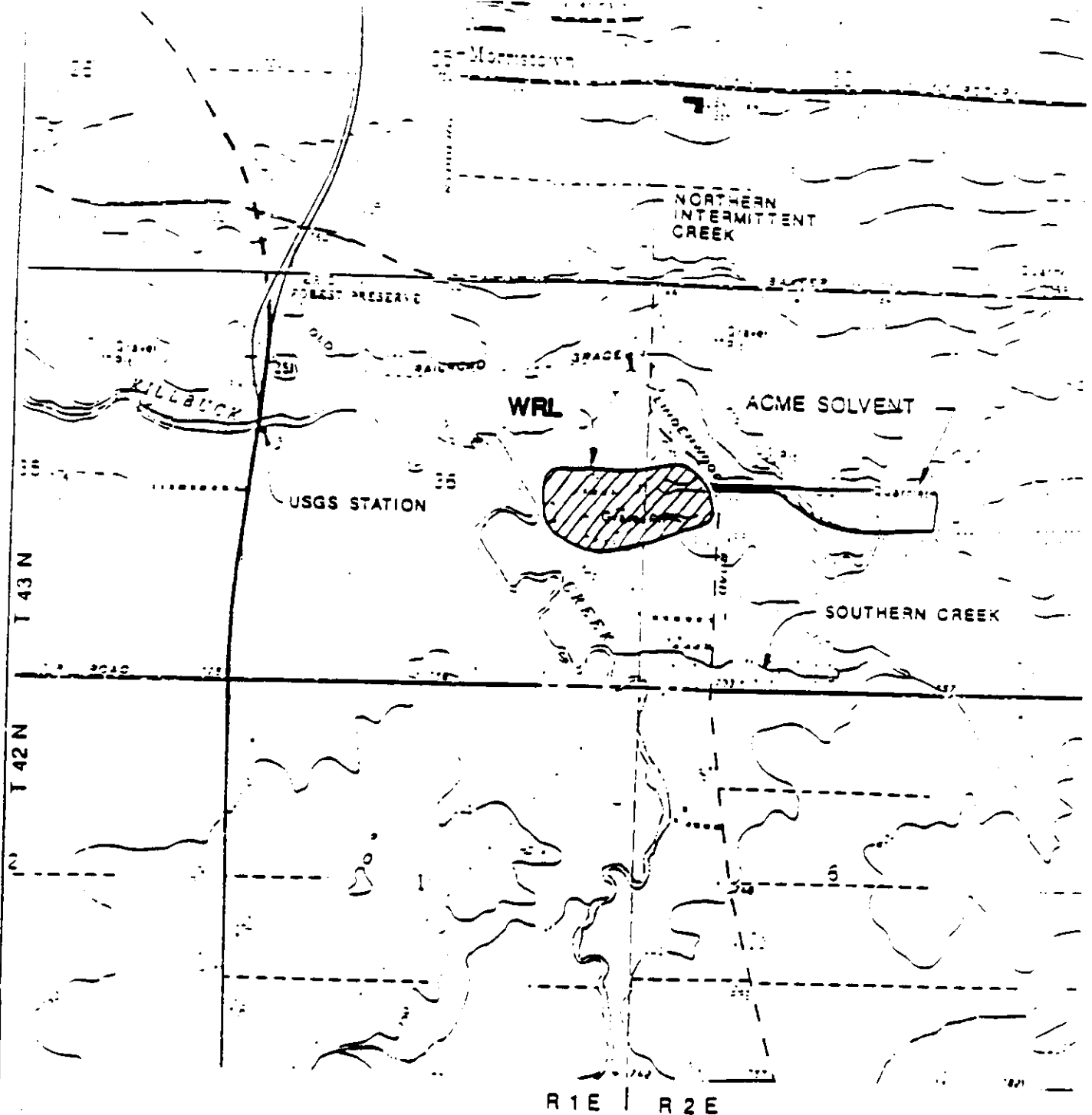
- The chlorinated ethenes include vinyl chloride, 1,1-dichloroethene, trichloroethene, tetrachloroethene, trans-1,2-dichloroethene, and cis-1,2-dichloroethene.
- For each parameter, the data are shown for the four rounds of sampling in the order in which the sampling was done.
- Well locations are shown on Figure 4.

Table 2
Cost Estimates for Remedial Action

Alternative 5: On-Site Carbon Adsorption of Groundwater
Alternative 6: On-Site Air Stripping of Groundwater

	<u>Alt. 5</u>	<u>Alt. 6</u>
<u>Direct Capital Costs</u>	<u>Cost</u>	<u>Cost</u>
IAC 811 Compliant Cap (47 acres)	\$2,863,000	\$2,863,000
Upgraded Gas Collection System (53 wells)	\$412,000	\$412,000
Enhanced Leachate Collection System (42 pumps)	\$335,000	\$335,000
Service Pipeline to POTW Sewer (5000 feet)	\$556,000	\$556,000
Groundwater Extraction/Collection System (6 wells)	\$120,000	\$120,000
Groundwater Treatment System	\$150,000	\$72,000
Organic Pretreatment Contingency	\$100,000	--
Groundwater Monitoring Wells (9 wells)	\$48,000	\$48,000
Total Direct Capital Costs	<u>\$4,620,000</u>	<u>\$4,410,000</u>
<u>Indirect Capital Costs</u>	<u>% of Capital</u>	
Mobilization	5%	\$231,000
Health & Safety	10%	\$462,000
Engineering Design	5%	\$231,000
Startup Costs	5%	\$231,000
Permits and Documents	10%	\$462,000
Total Indirect Capital Costs		<u>\$1,550,000</u>
TOTAL CAPITAL COSTS	\$6,240,000	\$5,960,000
<u>Annual Operation & Maintenance Costs</u>		
Site Maintenance and Monitoring	\$41,400	\$41,400
Gas Extraction/Treatment System	\$25,000	\$25,000
Leachate Collection/Treatment System	\$16,300	\$16,300
Groundwater Collection/Treatment System	\$157,300	\$95,300
Insurance	\$10,000	\$10,000
Reserve Fund	\$10,000	\$10,000
Administrative	\$50,000	\$50,000
Total Annual O & M Costs	<u>\$310,000</u>	<u>\$248,000</u>
Total O & M Net Present Worth	\$4,770,000	\$3,810,000
TOTAL NET PRESENT WORTH	\$11,000,000	\$9,800,000

Note: Net present worth is based on a 5% discount rate and 30 years.



BASE MAP DEVELOPED FROM ROCKFORD SOUTH, ILLINOIS
7.5 MINUTE USGS TOPOGRAPHIC QUADRANGLE MAP
DATED 1971 PHOTOREVISED 1976

Figure 1. Location of Pagel's Pit
Site (Winnebago Reclamation Land-
fill (WRL))



north

SCALE: 1"=2000'

WARZYN

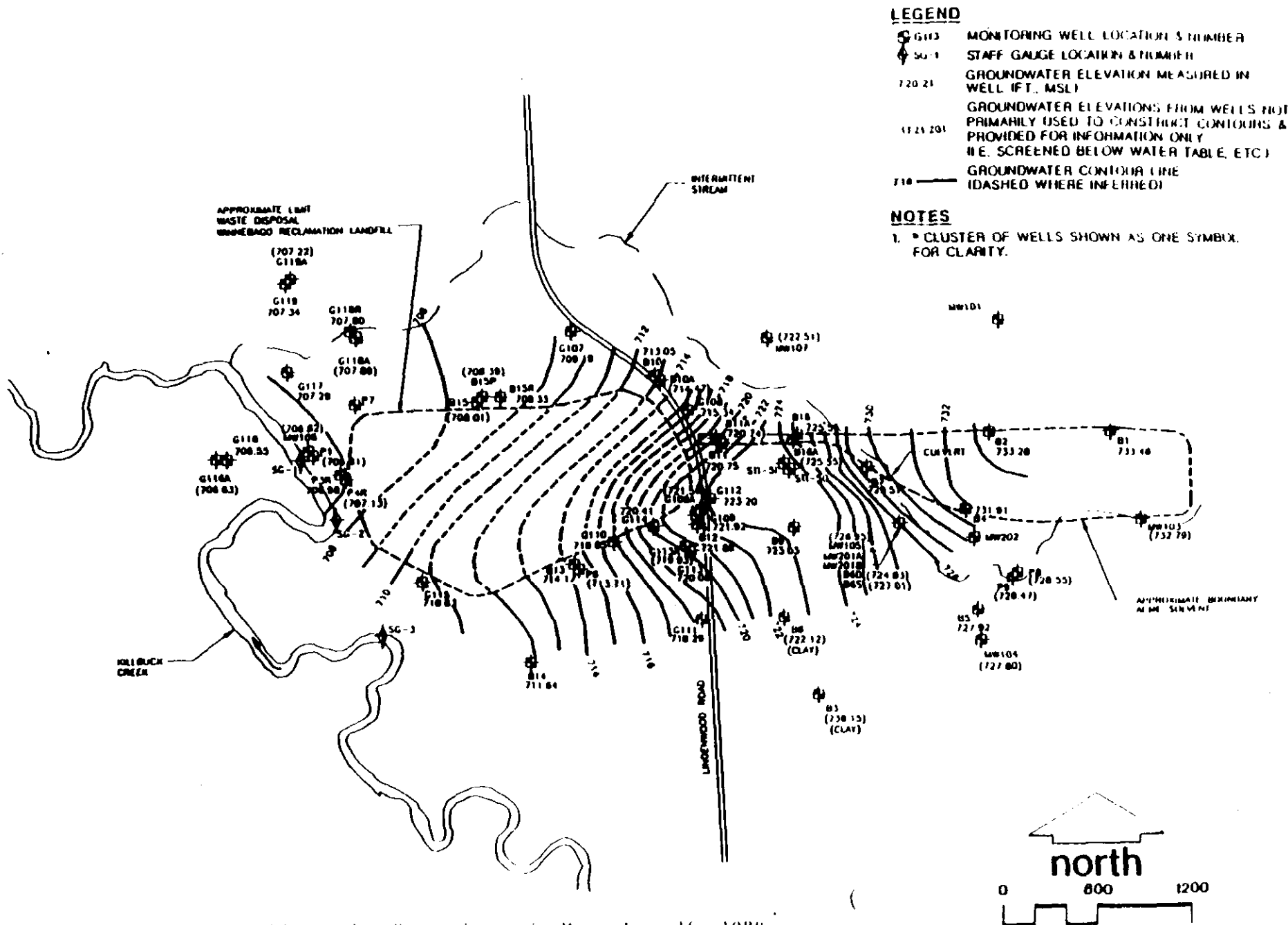


SITE LOCATION MAP

WINNEBAGO RECLAMATION
LANDFILL
ROCKFORD, ILLINOIS

OWN 2.1.1 APP'D *[Signature]* DATE 11/22/99 13160

A1



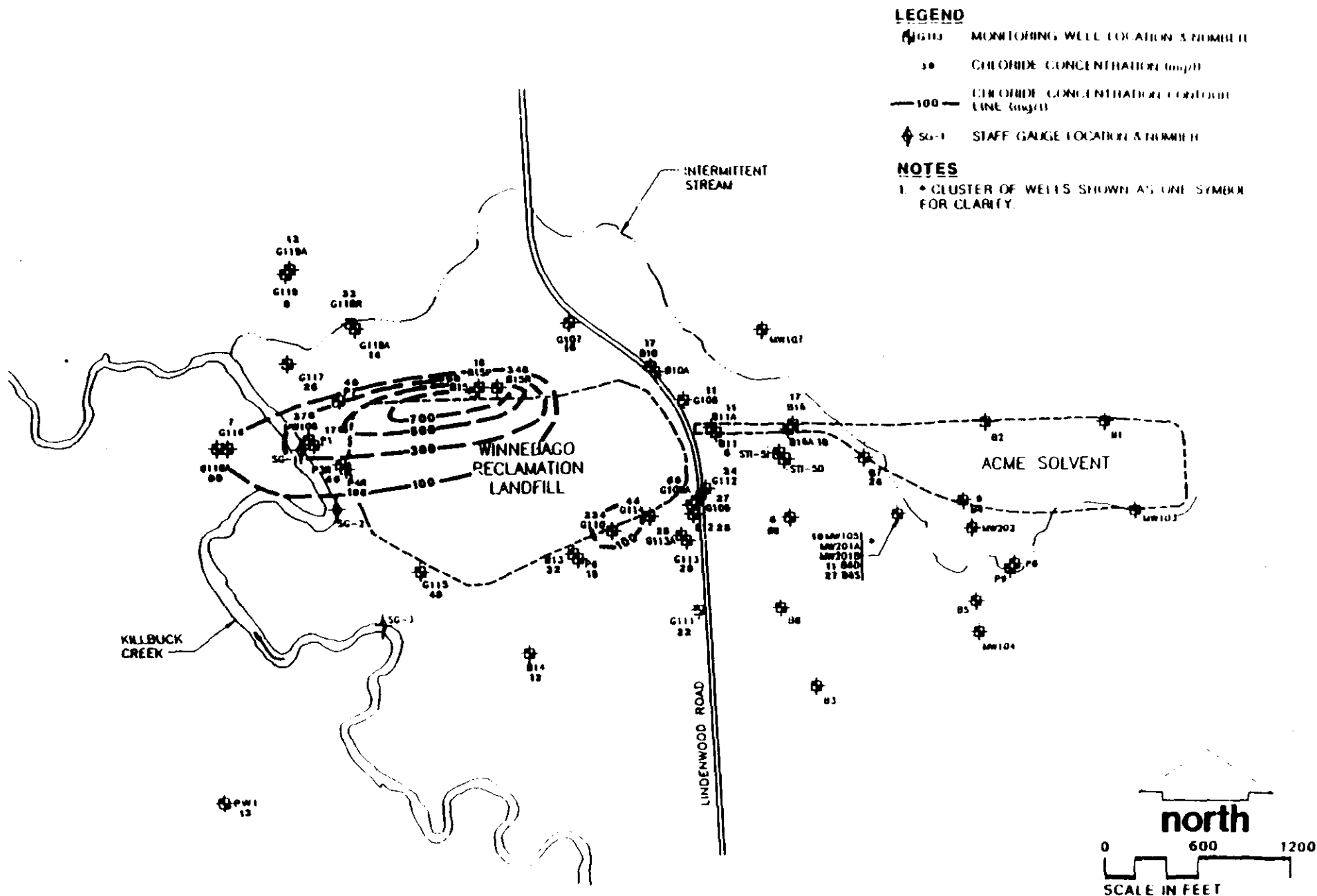


Figure 4. Chloride Concentrations, Round 2

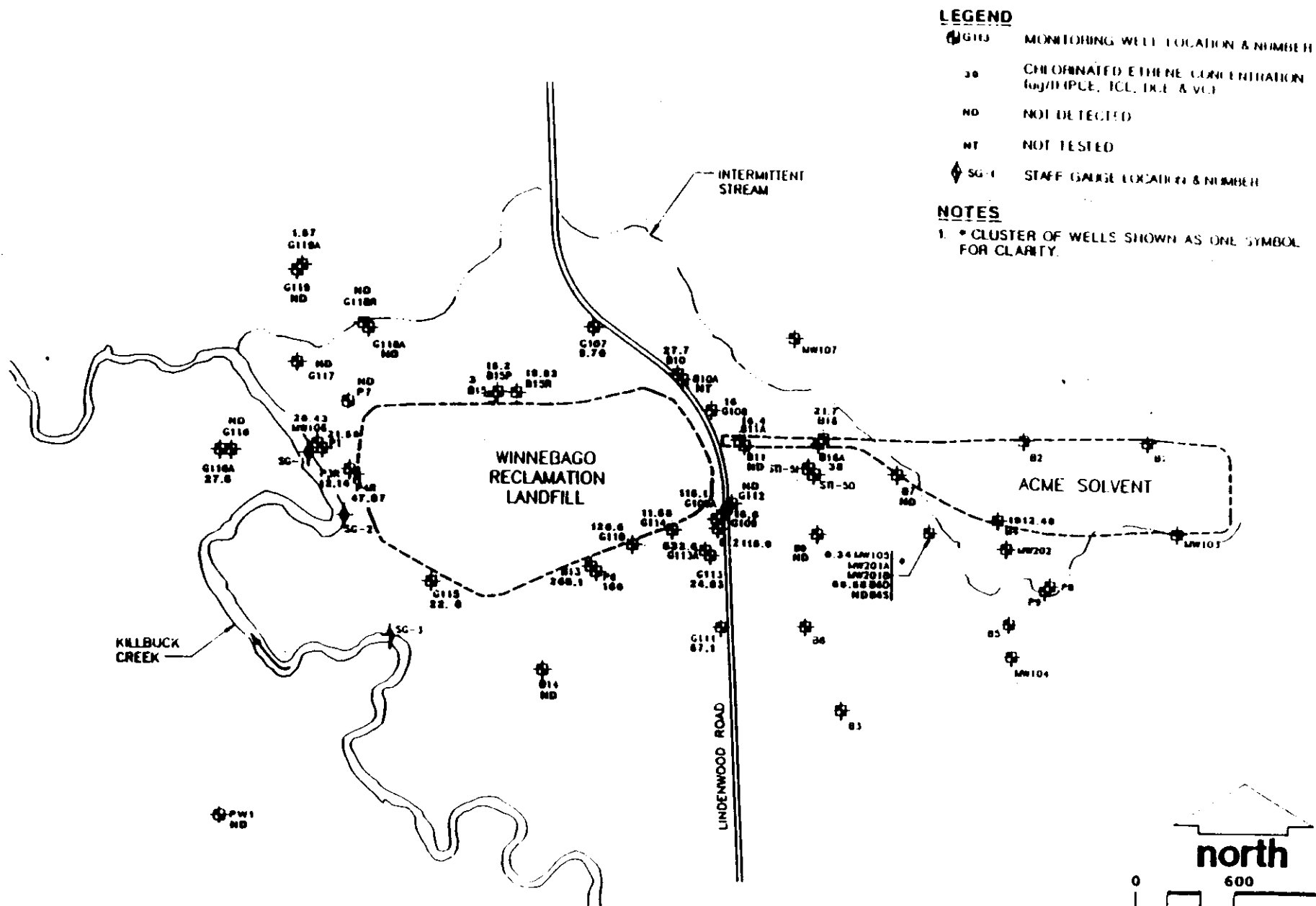
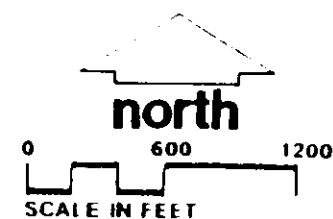
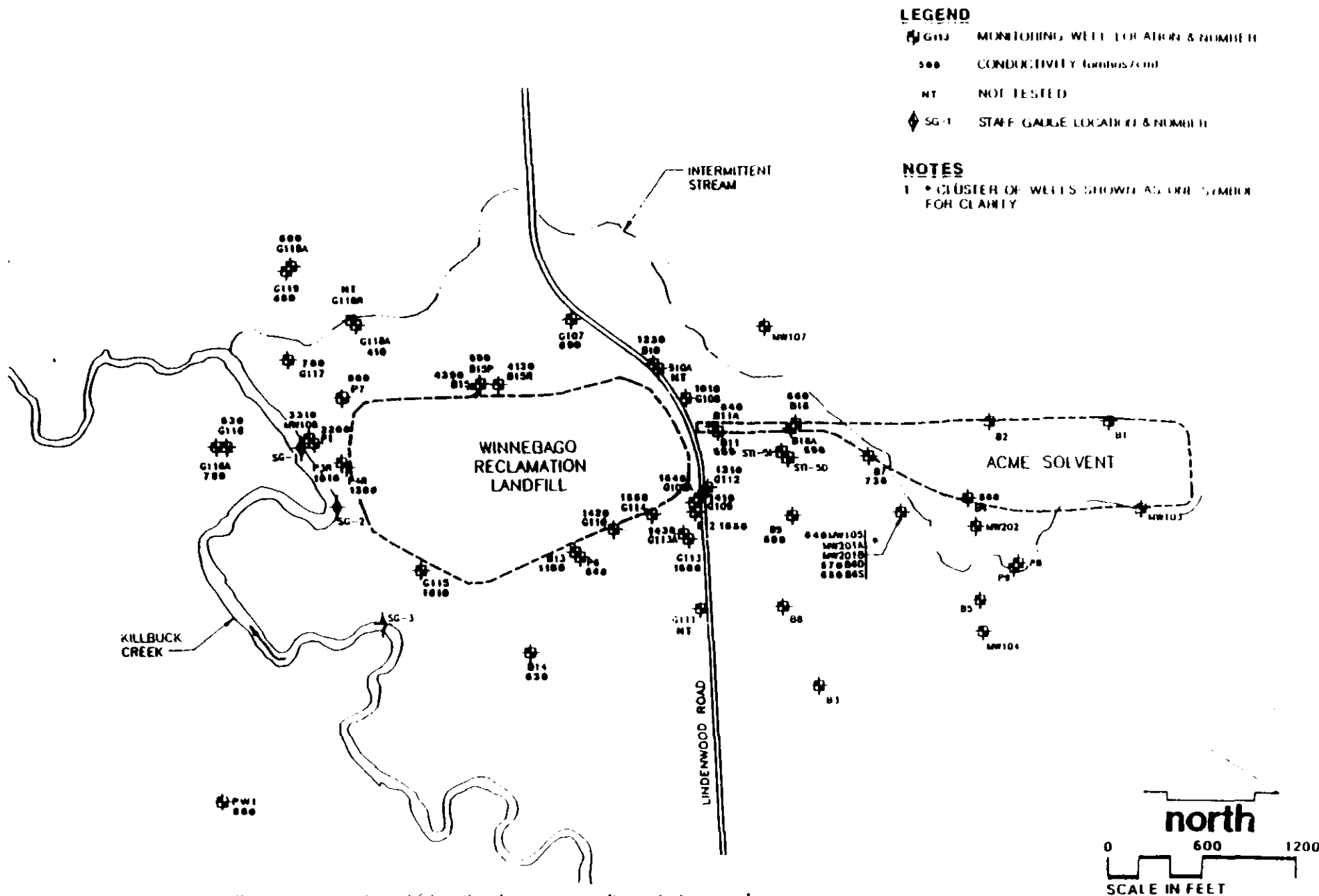


Figure 5. Chlorinated Ethenes Concentrations, Round 2





Appendix A

ADMINISTRATIVE RECORD INDEX
PAGEL'S PIT LANDFILL SITE
ROCKFORD, ILLINOIS

FILE FRAME	PAGES	DATE	TITLE	AUTHOR	RECIPIENT	DOCUMENT TYPE
3	75	7/1/80	Letter re: Receipt of series of requests for issuance or renewal of certain supplemental permits	Michael W. Rapps, USEPA	Rockford Blacktop Constr.	Correspondence
5	30	04/28	Letter Re: Hydrogeologic Investigation, Pagel Pit Landfill	Steven G. Wittmann and Daniel R. Viste, Varzyn Engineering, Inc.	C. Howard, Blacktop Constr.	Correspondence
4	30	10/10	Letter re: Leachate for the EP Toxicity Test for Pagel Pit	Violet Chen, Sanitary District of Rockford	W. Foristal, RSSI	Correspondence
9	34	04/30	Letter re: Attached copies of Pagel Pit leachate analysis	Richard W. Eick, Sanitary District of Rockford	D. Favero, USEPA	Correspondence
2	34	10/19	Letter re: Proposed Amendment to CERCLA National Priorities List	Ridgway M. Hall, Crowell & Moring	W. Hedeman, USEPA	Correspondence
2	34	10/22	Letter re: Proposed Amendment to CERCLA National Priorities List	Ridgway M. Hall, Crowell & Moring	L. Friedman, USEPA	Correspondence
1	34	10/22	Letter re: Proposed Addition of Pagel's Pit to the National Priorities List	Ridgway M. Hall, Crowell & Moring	R. Bartlett, USEPA	Correspondence
3	34	12/06	Letter re: Proposed Amendment to the CERCLA National Priorities List	Ridgway M. Hall, Crowell & Moring	W. Hedeman, USEPA	Correspondence
7	35	03/27	Letter re: Supplement to Comments in Response to EPA's Notice of Proposal to Add Sites to the CERCLA National Priorities List (Proposed October 15, 1984)	Ridgway M. Hall, Jr., Crowell & Moring	D. Favero, USEPA	Correspondence
4	35	07/12	Letter re: Groundwater level monitoring	James A. Hill and Daniel W. Hall, Varzyn Engineering	C. Howard, Winnebago	Correspondence

ADMINISTRATIVE RECORD INDEX
PAGEL'S PIT LANDFILL SITE
ROCKFORD, ILLINOIS

FILE FRAME PAGES DATE	TITLE	AUTHOR	RECIPIENT	DOCUMENT TYPE	
		Inc.			
1 36/08/28	Letter re: Administrative Order by Consent and the date of the press release	Lisa Seglin, USEPA	R. Hall, Crowell & Moring	Correspondence	1
2 36/10/09	Letter re: Comment period on the Administrative Consent Order (receipt attached)	Lisa S. Seglin, USEPA	G. Marzorati	Correspondence	2
2 37/01/21	Letter re: Pagel's Pit Administrative Order by Consent, USEPA's comments on Receptor/Pathway Analysis	David Favero, USEPA	G. Marzorati, Winnebago	Correspondence	3
1 37/10/08	Letter re: Warzyn Project Manager for the Remedial Investigation activities	James A. Hill and Daniel W. Hall, Warzyn Engineering, Inc.	D. Favero, USEPA	Correspondence	4
2 38/04/22	Letter re: Comments concerning sampling at Pagel's Pit	Robert T. Kay, United States Department of Interior	K. Waldvogel, USEPA	Correspondence	5
5 39/05/25	Letter re: Enclosed copies of stream flow and water quality data for Killbuck Creek south of New Milford	Robert Kay, United States Department of Interior	B. Schorle, USEPA	Correspondence	6
3 39/05/31	Letter re: Round IV Leachate Sampling Pagel's Landfill	James A. Hill, Warzyn Engineering, Inc.	B. Schorle, USEPA	Correspondence	7
5 39/10/16	Letter re: Comments concerning technical matters at Pagel's Pit	Robert Kay	B. Schorle, USEPA	Correspondence	8
1 39/10/20	Letter re: Locations of additional wells	Bernard J. Schorle, USEPA	G. Marzorati, Winnebago	Correspondence	9
3 39/10/24	Letter re: Project Status, Winnebago Reclamation Landfill, Remedial Investigation	James A. Hill and Gary E. Parker, Warzyn Engineering Inc.	B. Schorle, USEPA	Correspondence	10

ADMINISTRATIVE RECORD INDEX
PAGEL'S PIT LANDFILL SITE
ROCKFORD, ILLINOIS

FIGURE/FRAME	PAGES	DATE	TITLE	AUTHOR	RECIPIENT	DOCUMENT TYPE	
2	39/10/25	Letter re: Certified Letter of October 20, 1989 Winnebago Reclamation (Pagel Pit) Landfill	Gary L. Marzorati, Winnebago Reclamation Service, Inc.	B. Schorle, USEPA	Correspondence		
4	89/11/13	Letter re: Response to letter of October 20, 1989 requesting Respondents undertake certain additional work	James A. Hill and Gary E. B. Schorle, USEPA Parker, Warzyn Engineering Inc.		Correspondence	1	
3	90/01/15	Letter re: Update of Table 3 in GAPP, Winnebago Reclamation Landfill	Gary E. Parker, Warzyn Engineering, Inc.	B. Schorle, USEPA	Correspondence	1	
4	90/03/09	Letter re: Additional wells in the area between Crowell & Moring Winnebago Reclamation Landfill and the Acme Solvent sites	Ridgway M. Hall, Jr.	S. Kaiser, USEPA	Correspondence	1	
2	90/05/03	Letter re: March 9, 1990 letter setting forth proposal to share costs and responsibility for the installation of additional groundwater sampling wells	Steven P. Kaiser, USEPA	R. Hall, Crowell & Moring	Correspondence	11	
2	90/10/01	Letter re: Update on status of plan to develop additional landfill space in area south of existing Pagel's Landfill	Gary L. Marzorati, Winnebago Reclamation Service, Inc.	B. Schorle, USEPA	Correspondence	11	
1	90/10/05	Letter re: Request for ARARs and TBCs	Bernard J. Schorle, USEPA	P. Takacs, IEPA	Correspondence	11	
5	90/11/27	Letter re: Identification of ARARs	Paul E. Takacs, Illinois Environmental Protection Agency	B. Schorle, USEPA	Correspondence	11	
17	90/11/30	Letter re: Pagel's Pit Site--ARARs	Bernard J. Schorle, USEPA	G. Parker, Warzyn Eng.	Correspondence	11	
4	37/00/00	Acme Solvent and Pagel's Pit Site	USEPA		Fact Sheets	11	

ADMINISTRATIVE RECORD INDEX
PAGEL'S PIT LANDFILL SITE
ROCKFORD, ILLINOIS

NO-REFRAME	PAGES	DATE	TITLE	AUTHOR	RECIPIENT	DOCUMENT TYPE	
1		87/06/00	Superfund Update, Acme Solvent/Pagel's Pit	USEPA		Fact Sheets	11
10		90/10/00	Proposed Plan for the Acme Solvent Reclaiming, Inc. Superfund Site	USEPA		Fact Sheets	12
2		90/10/29	Pagel's Pit Alternatives Array	Judy Kleiman, USEPA	B. Schorle, USEPA	Memorandum	13
4		90/11/02	Memo re: Water Division Review of Draft Alternative Array Report	Dale S. Bryson, USEPA	D. Ullrich, USEPA	Memorandum	14
2		90/11/05	Memo re: Alternatives Array Document(AAD)	William Beyer, USEPA	B. Schorle, USEPA	Memorandum	15
1		90/11/09	Memo re: TSCA ARARs review of Pagel's Pit HPL Site, Winnebago Reclamation Landfill, CERCLA Alternatives Array Document	Stephen M. Johnson, USEPA	B. Schorle, USEPA	Memorandum	16
7		90/11/09	Memo re: Toxicity Values Per-Fung Hurst, (Pagel's Pit/Illinois)	USEPA	B. Schorle, USEPA	Memorandum	17
11		90/00/00	Response to Comments on Proposed HPL Listing			Other	18
34		84/06/11	Revised Scoring Package for Pagel's Pit			Other	19
59		84/07/17	Letter re: Attached booklet including Ecology & Environment's HRS Ranking, Roto Roster and Varzym HRS Ranking	C.J. Howard, Winnebago Reclamation Service, Inc.	R. Bartlett, USEPA	Other	20
198		84/12/14	Comments Submitted to the United States Environmental Protection Agency on its Proposed Listing of Pagel's Pit on the Superfund National Priorities List (proposed October 15, 1984)	Winnebago Reclamation Service, Inc.		Other	21

ADMINISTRATIVE RECORD INDEX
PAGEL'S PIT LANDFILL SITE
ROCKFORD, ILLINOIS

FIGURE/FRAME	PAGES	DATE	TITLE	AUTHOR	RECIPIENT	DOCUMENT TYPE	
		84/06/07	Phone Conversation re: Winnebago Co. Forest Preserve.	Rodney J. Lynn	Mark Keister	Phone Record	
31		86/08/27	Administrative Order by Consent with attached Statement of Work (effective date October 16, 1986)			Pleadings/Orders	
-		80/05/27	Potential Hazardous Waste USEPA Site Identification and Preliminary Assessment			Reports/Studies	--
37		80/08/15	Methane Study, Winnebago Reclamation Service, Inc. Pagel Pit Landfill (Cover Letter)	Warzyn Engineering, Inc.	C. Howard, Winnebago Reclam	Reports/Studies	17
13		81/12/00	Geology for Planning in Boone and Winnebago Counties Illinois	Richard C. Berg, John P. Kempton and Amy M. Stacyk Illinois State Geological Survey		Reports/Studies	40
5		83/02/21	Preliminary Assessment	Paul D. Shea, Ecology & Environment	USEPA	Reports/Studies	17
109		83/03/00	Extent of Sources of Groundwater Contamination, Acme Solvents Pagel's Pit Area Near Morrisdown, Illinois	Ecology & Environment, Inc.	USEPA	Reports/Studies	41
16		83/08/22	Potential Hazardous Waste USEPA Site Inspection Report			Reports/Studies	42
163		85/03/27	Report Entitled: Supplemental Investigation Winnebago Reclamation Landfill	Warzyn Engineering, Inc.	USEPA	Reports/Studies	50
120		85/06/00	Review of RI/FS Work on the Acme Solvents Site	Eugene A. Hickok and Associates	Acme Technical Committee	Reports/Studies	51
14		86/11/00	QA/QC Data Review - Technical Memorandum -	Warzyn Engineering, Inc.		Reports/Studies	52

ADMINISTRATIVE RECORD INDEX
PAGEL'S PIT LANDFILL SITE
ROCKFORD, ILLINOIS

ICR#/FRAME	PAGES	DATE	TITLE	AUTHOR	RECIPIENT	DOCUMENT TYPE	
17	86/11/00		Technical Memorandum: Receptor/Pathway Analysis Pagel's Pit Landfill.	Warzyn Engineering, Inc.	PRP Steering Committee	Reports/Studies	11
18	87/08/00		Health and Safety Plan, Remedial Investigation and Feasibility Study, Pagel's Pit Landfill	Warzyn Engineering, Inc.	Respondent's Steering Comm.	Reports/Studies	12
19	87/08/14		Remedial Investigation/ Feasibility Study Work Plan	Warzyn Engineering, Inc.	Respondent's Steering Comm.	Reports/Studies	13
296	87/12/00		Quality Assurance Project Plan, Remedial Investigation/Feasibility Study	Warzyn Engineering, Inc.	Respondent's Steering Comm.	Reports/Studies	14
104	88/01/19		Report: Activity 3A.1 Landfill Operation (with cover letter)	Gary Marzorati, Winnebago Reclamation Service, Inc.	J. Hill, Warzyn Eng.	Reports/Studies	17
24	88/01/30		Quality Assurance Project Plan (QAPP)	Warzyn Engineering, Inc.		Reports/Studies	18
178	90/03/00		Interim Groundwater Quality Evaluation and Appendices	Warzyn Engineering, Inc.	Respondent's Steering Comm.	Reports/Studies	19
16	90/09/00		Alternatives Array Document	Warzyn Engineering, Inc.	PRP Group	Reports/Studies	20
170	91/03/00		Remedial Investigation Report, Winnebago Reclamation Landfill Volume 1 of 2	Warzyn, Inc.	Pagel's Pit PRPs	Reports/Studies	21
166	91/03/00		Remedial Investigation Report, Winnebago Reclamation Landfill Volume 2 of 2	Warzyn, Inc.	Pagel's Pit PRPs	Reports/Studies	22
109	91/03/00		Feasibility Study Report, Winnebago Reclamation Landfill	Warzyn, Inc.	Pagel's Pit PRPs	Reports/Studies	23

ADMINISTRATIVE RECORD REFERENCE INDEX
PAGEL'S PIT LANDFILL SITE, ROCKFORD, ILLINOIS
DOCUMENTS LISTED MAY BE FOUND IN THE ACME SOLVENT (AR)
AT THE ROCKFORD PUBLIC LIBRARY, 215 N. WYMAN, ROCKFORD, IL.

DATE	TITLE	AUTHOR	RECIPIENT	DOCUMENT TYPE
85/02/00	Preliminary Feasibility Study, Technical Report, Acme Solvents Superfund Site	E.C. Jordan Co.	EPA	Reports/Studies
87/09/00	Final Community Relations Plan, Acme Solvent Site and Pagel's Pit Site	Jacobs Engineering Group, Inc.	USEPA	Reports/Studies
90/02/23	Supplemental Technical Investigation Final Report, Acme Solvents Site	Harding Lawson Associates	USEPA	Reports/Studies
90/08/06	Engineering Evaluation/Cost Analysis Final Report	Harding Lawson Associates	USEPA	Reports/Studies
90/09/20	Remedial Action Alternatives Evaluation Final Report, Acme Solvent Site	Harding Lawson Associates	USEPA	Reports/Studies

GUIDANCE DOCUMENTS INDEX
PAGE 1'S PIT LANDFILL SITE
Guidance Documents are available for review at
USEPA Region V-Chicago, IL

TITLE	AUTHOR	DATE
Superfund Remedial Design and Remedial Action (RD/RA) Guidance	USEPA	86/06/01
Superfund Federal-Lead Remedial Project Management Handbook	USEPA	86/12/00
Data Quality Objectives for Remedial Response Activities: Example Scenario: RI/FS Activities at a Site with Contaminated Soils and Ground Water (Volume 2)	USEPA	87/03/00
Data Quality Objectives for Remedial Response Activities: Development Process (Volume 1)	USEPA	87/03/00
A Compendium of Superfund Field Operations	USEPA	87/12/01
Community Relations in Superfund: A Handbook (Interim Guidance)	USEPA	88/06/00
Standard Operating Safety Guides	OSHA	88/07/05
CERCLA Compliance with Other Laws Manual, Part I: (Interim Final)	USEPA	88/08/00
Guidance for Conducting Remedial Investigations and Feasibility Studies (RI/FS) Under CERCLA	USEPA	88/10/00
Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites	USEPA	88/12/00
Risk Assessment Guidance for Superfund, Volume II: Environmental Evaluation	USEPA	89/03/00

GUIDANCE DOCUMENTS INDEX
PAGEL'S PIT LANDFILL SITE
Guidance Documents are available for review at
USEPA Region V-Chicago IL

TITLE	AUTHOR	DATE
Manual		
Applicable or Relevant and Appropriate Requirements (ARARs) Gs & As	USEPA	89/05/00
Control of Air Emissions from Superfund Air Strippers at Superfund Ground Water Sites	USEPA	89/06/15
Guidance on Preparing Superfund Decision Documents: The Proposed Plan, the Record of Decision, Explanation of Significant Differences; The Record of Decision Amendment (Interim Final)	USEPA	89/07/00
Superfund LDR Guide #5: Determining When Land Disposal Restrictions (LDRs) are "Applicable" to CERCLA Response Actions	USEPA	89/07/00
Superfund LDR Guide #4: Complying with the Hammer Restrictions Under Land Disposal Restrictions (LDRs)	USEPA	89/07/00
Superfund LDR Guide #3: Treatment Standards and Minimum Technology Requirements Under Land Disposal Restrictions (LDRs)	USEPA	89/07/00
Superfund LDR Guide #2: Complying with the California List Restrictions Under Land Disposal Restrictions (LDRs)	USEPA	89/07/00

GUIDANCE DOCUMENTS INDEX
 PAGEL'S PIT LANDFILL SITE
 Guidance Documents are available for review at
 USEPA Region V-Chicago IL

TITLE	AUTHOR	DATE
Superfund LOR Guide #1: Overview of RCRA Land Disposal Restrictions (LDRs)	USEPA	89/07/00
CERCLA Compliance with Other Laws Manual, Part II: Clean Air Act and other Environmental Statutes and State Requirements	USEPA	89/08/00
Getting Ready: Scoping the RI/FS	USEPA	89/11/00
The Feasibility Study: Development and Screening of Remedial Action Alternatives	USEPA	89/11/00
A Guide to Developing Superfund Records of Decision	USEPA	89/11/00
The Remedial Investigation: Site Characterization and Treatability Studies	USEPA	89/11/00
A Guide to Developing Superfund Proposed Plans	USEPA	89/11/00
Notification of Out-of-State Shipments of Superfund Site Wastes	USEPA	89/11/14
Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Part A	USEPA	89/12/00
CERCLA Compliance with Other Laws Manual: CERCLA Compliance with the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA)	USEPA	90/02/00
The Feasibility Study:	USEPA	90/03/00

GUIDANCE DOCUMENTS INDEX
PAGE 1'S PIT LANDFILL SITE
Guidance Documents are available for review at
USEPA Region V-Chicago IL

TITLE	AUTHOR	DATE
Detailed Analysis of: Remedial Action Alternatives		
Guide to Selecting Superfund Remedial Actions	USEPA	90/04/00
Risk Assessment Guidance for Superfund, Volume 1: Human Health Evaluation Manual, Part A	USEPA	90/04/00
Streamlining the RI/FS for CERCLA Municipal Landfill Sites	USEPA	90/09/00
CERCLA Site Discharges to POTWS: Guidance Manual	USEPA	90/09/00
Basics of Pump and Treat Ground Water Remediation Technology	USEPA	90/09/00

ACRONYM GUIDE for the Administrative Record
Paget's Pit Landfill Site
Rockford, Illinois

ACRONYM	DEFINITION
AAD	Alternatives Array Document
ARARS	Applicable or Relevant and Appropriate Standards, Limitations, Criteria and Requirements
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
HRS	Hazardous Ranking Score
IEPA	Illinois Environmental Protection Agency
LDR	Land Disposal Restriction
NPL	National Priority List
POTW	Publicly Owned Treatment Works
PRP	Potentially Responsible Party
QA/QC	Quality Control/Quality Assurance
QAPP	Quality Assurance Project Plan
RA	Remedial Action
RD	Remedial Design
RI/FS	Remedial Investigation/Feasibility Study
RSSI	Reitech Scientific Services, Inc.
TSCA	Toxic Substances Control Act
USEPA	United States Environmental Protection Agency

Administrative Record Update No. 1
Pagel's Pit Site

Preliminary Health Assessment for Pagel's Pit, Rockford, Illinois, January 13, 1989

Memorandum, April 22, 1991, to David Ullrich, Director, (Hazardous) Waste Management Division, Region 5, from Sally Mansbach, Acting Director, CERCLA Enforcement Division, USEPA, Washington, Containment-Only Consultation, Pagel's Pit, Winnebago County, IL

Letter, April 2, 1991, from Paul E. Takacs, IEPA, to Bernard J. Schorle, USEPA, Draft of Proposed Plan

Proposed Plan for the Pagel's Pit Superfund Site, Winnebago County, Illinois, April 1991

Proposed Plan for the Pagel's Pit Superfund Site, Winnebago County, Illinois (Fact Sheet), April 1991

Declaration for the Record of Decision and Record of Decision Summary, Acme Solvent Reclaiming, Inc., December 31, 1990

Transcript of the Public Meeting, Pagel's Pit, (Meeting Date: April 25, 1991), May 1, 1991

Letter, April 20, 1991, from James Lightcap to USEPA, Comments on the Proposed Plan

Letter, May 9, 1991, from Ben Costello, Applied Hydrology Associates, Inc. to Bernard J. Schorle, USEPA, Acme Solvents Site PRPs Comments on the Proposed Plan for the Pagel's Pit Superfund Site Winnebago County, Illinois

Letter, May 13, 1991, from Betty Johnson, The League of Women Voters of Rockford, Comments on EPA Proposed Plan for the Pagel's Pit Superfund Site, April, 1991

Letter, May 15, 1991, from Ridgeway M. Hall, Jr. and Susan R. Koehn, Crowell & Moring, to Bernard J. Schorle, USEPA, transmitting the report "Comments by Pagel's Pit Landfill Participating PRPs in Response to EPA's Proposed Plan for the Winnebago Reclamation Landfill Superfund Site", by The Pagel's Pit Landfill Participating PRPs, May 15, 1991.

Letter, June 3, 1991, from Ridgeway M. Hall, Jr. and Susan R. Koehn, Crowell & Moring, to Bernard J. Schorle, USEPA, Winnebago Reclamation Landfill, and enclosed EPA Guidance, OSWER Directive 9285.6-03 dated March 25, 1991

Memo, June 11, 1991, from Erin Moran, USEPA, to Bernard Schorle, USEPA, Pagel's Pit, Winnebago County, Illinois, Risk Assessment Review

APPENDIX B

RESPONSIVENESS SUMMARY PAGEL'S PIT SITE WINNEBAGO COUNTY, ILLINOIS

I. RESPONSIVENESS SUMMARY OVERVIEW

In accordance with CERCLA Section 117, the USEPA and IEPA held a public comment period from April 16, 1991 through May 16, 1991 to allow interested parties to comment on the reports for the remedial investigation and the feasibility study and on the Proposed Plan for remedial action at the Pagel's Pit site. At a public meeting that was held on April 25, 1991, representatives of USEPA and IEPA discussed the proposed alternatives for remediating the site, answered questions about the site and the problems there, and were prepared to receive verbal and written comments.

The purpose of this responsive summary is to document the comments received during the public comment period and the response of USEPA to these comments. All comments summarized in this document were considered in USEPA's final decision for remedial action at the Pagel's Pit site.

II. BACKGROUND ON COMMUNITY INVOLVEMENT AND CONCERNS

The residents on Lindenwood Road near the site have been concerned about this site and the Acme Solvent site since at least 1981. Groundwater wells of some of the residences are contaminated, and this is presently being addressed by some of the PRPs for the Acme Solvent site who have furnished home carbon treatment units for these residences. Being neighbors of an operating landfill causes some concern to the people in the neighborhood, as does the proposal to open another landfill to the south of the present site.

Generally, the site does not appear to cause much concern to people who are not immediate neighbors. News about the site is published, but the attention that is paid to it does not appear to be any greater than one would expect.

At the April 1991 public meeting, no comments were presented. The questioning generally dealt with the Acme Solvent site, the groundwater contamination, the methane gas, the proposed landfill to the south of the present landfill, the continued operation of the Pagel's Pit site as a landfill until it reaches capacity, the future study in the southeast corner of the site, the sludge going to the landfill, and the land purchases by the operators of the Pagel's Pit site in the area.

III. SUMMARY OF SIGNIFICANT COMMENTS RECEIVED DURING THE COMMENT PERIOD AND THE RESPONSES OF USEPA

The comments have been organized into the following categories:

A. Comments from the general public

1. Comments from the community (including The League of Woman Voters of Rockford)

2. Comments from the Acme Solvent site PRPs

B. Comments from the Pagel's Pit site PRPs

The comments have been summarized for presentation in this document. The reader is referred to the public repository for the full comments.

A. Comments From the General Public

1. Comments From the Community

COMMENT: A Rockford resident said that it was foolish to place a burden on Rockford for a landfill, apparently referring to the cost of the remedial action.

RESPONSE: When a site may present an imminent and substantial endangerment to public health, welfare, and the environment, USEPA must take some action. The Pagel's Pit site is such a site. Whether taking action at this site will place a financial burden on the citizens of Rockford will depend upon the parties that are named as being potentially responsible and that participate in the remedial design and remedial action, and whether they pass their share of the costs on to the citizens of Rockford.

COMMENT: Alternative 5a is better than 5 because this would result in the reduction of both toxicity and volume for the leachate by destroying most of the volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). The report for the feasibility study is quoted, stating that it says that Alternative 5a is one of the simplest to construct and operate because it does not involve discharging leachate to the publicly owned treatment works (POTW) for treatment. It is pointed out that future regulations might make it difficult or impossible to send the leachate to the POTW and this should be anticipated.

RESPONSE: The leachate has been going to the POTW for a number of years, and no adverse effects from this practice have been demonstrated. The quantity of leachate generated at the site is expected to decrease significantly as the final cover is placed on the landfill. This will greatly complicate the design and operation of a process for the treatment of leachate since most processes have only a restricted range of capacity over which optimum results are obtained. Treatment at the POTW will result in the destruction of some of the organics through biological

oxidation, which will be a reduction in toxicity. It is debatable that Alternative 5a is simpler to construct and operate than Alternative 5. It would appear that it would be easier to send a material, with a small amount of pretreatment, through a pipe to another facility than it would be to operate a plant at the site for full treatment, particularly when the plant would not be very large. And, although it is true that regulations might change and cause a significant change in the way the leachate must be handled in the future, this is something that can be addressed at the time that it happens. This is not believed to be reason enough at this time to discontinue a system that has been working for a number of years.

COMMENT: Alternatives 6 and 6a do not include the advantages of Alternative 5a and should not be used. The concern here is with the emissions of VOCs to the atmosphere if no activated carbon is used for removal of VOCs from the stripping gas. It is pointed out that there is no reliable data on ambient air pollution testing at the site.

RESPONSE: It is expected that the air emissions from the air stripping column would be low enough that treatment of the vapors would not be required. If an air stripper is used, the air emissions will be examined further during the design of the system, and if that study determines that controls are necessary, the controls will be added. This study will include modeling to predict air emissions from the site and might include further air monitoring studies since those done previously had limited value. The discharges from the air stripper will be subject to the approval of IEPA, will not be permitted to exceed health-based levels (an excess cancer risk of 1×10^{-5} at the nearest residence or business), and will have to meet all federal and state requirements.

COMMENT: A clay-synthetic membrane cap should be used for closure rather than an Illinois sanitary landfill cap in order to reduce the infiltration of water into the wastes to very low levels and therefore reduce the amount of leachate, which could be increased by long-term subsidence.

RESPONSE: The Pagel's Pit site is a sanitary landfill. There is no evidence that RCRA hazardous waste has been disposed of at the site, so a RCRA subtitle C cap would not be required. For these reasons, a sanitary landfill cap has been chosen for the closure. This sanitary landfill cap will be maintained until it can be shown that the maintenance is no longer needed.

COMMENT: The risk analysis does not include other health effects besides cancer, which include non-fatal tumors, birth and genetic defects, and diseases, such as those affecting

kidney and liver functions that may be caused by toxic and hazardous substances in the landfill. Cumulative and synergistic effects on human health and in the environment also need to be considered. Bioaccumulation seems to be ignored when calculating risk of contamination from Killbuck Creek.

RESPONSE: Health effects other than cancer are considered in the reference doses (RfDs) and in the calculations of the hazard quotients (HQs) and hazard indices (HIs). Such effects of concern as effects on the kidney, liver, nervous system, heart, brain, body weight, and reproduction are included. See, for example, Health Effects Assessment Summary Tables, January 1991 for other effects of concern that are considered. Also, Risk Assessment Guidance for Superfund (RAGS), Volume I, Part A (December 1989), on page 8-15 says that the hazard indices include such major effect categories as "neurotoxicity, developmental toxicity, reproductive toxicity, immunotoxicity, and adverse effects by target organs (i.e., hepatic, renal, respiratory, cardiovascular, gastrointestinal, hematological, musculoskeletal, and dermal/ocular effects)."

Adding the HQs to get an HI does add together the effects even though the effects of concern from the various substance might be different. This procedure assumes dose additivity in the absence of information on specific mixtures, which is rarely available.

"Uncertainties associated with summing risks or hazard indices for several substances are of particular concern in the risk characterization step. The assumption of dose additivity ignores possible synergisms or antagonisms among chemicals, and assumes similarity in mechanisms of action and metabolism. Unfortunately, data to assess interactions quantitatively are generally lacking. In the absence of adequate information, EPA guidelines indicate that carcinogenic risks should be treated as additive and that noncancer hazard indices should also be treated as additive. These assumptions are made to help prevent an underestimation of cancer risk or potential noncancer health effects at a site." (RAGS, Vol. I, Part A, p. 8-22)

In the environmental portion of the baseline risk assessment, maximum surface water concentrations were compared to lowest reported toxic chemical concentration for freshwater, ambient water quality criteria. For the VOCs, it appeared that there was little potential for adverse effects based on this comparison, and these substance are not expected to biomagnify. Exposure of fish to inorganic chemicals is not expected to cause adverse health effects based on acute exposure criteria. The chronic criteria is marginally exceeded for cyanide, but the average cyanide concentration was below the criteria. Therefore, deleterious health effects on fish are not expected.

Since the fish appear to be safe from health effects, other aquatic ecosystem effects are not anticipated.

COMMENT: Regulations need to be changed to exclude special wastes from sanitary landfills and reduce and reuse the toxic materials so that they do not contaminate the land, air, and water.

RESPONSE: Sending of these special wastes to sanitary landfill is not the purview of the USEPA.

2. Comments From the Acme Solvent Site PRPs

These comments were submitted by a party who stated that it was the Technical Manager for the remedial design and remedial action, employed by the Acme Solvents PRP Steering Committee. The comments have been presented here as submitted.

COMMENT: "The Proposed Plan contains no indication that the ground water in the St. Peter Sandstone was sampled and analyzed. Without sampling and analysis of the St. Peter Sandstone it may not be possible to accurately characterize the potential for vertical migration of materials from the Pagel's Pit site. We do not understand how it is possible to adequately '...characterize the nature and estimate the magnitude of potential risks to public health and the environment.' from the Pagel's Pit site without information on the potential for vertical migration of materials from the Pagel's Pit site."

RESPONSE: Not all of the studies and information that were in the report for the remedial investigation could be discussed in the few pages of the Proposed Plan, and there never is an attempt to do so. The upper aquifer was sampled at various depths to determine how the concentrations of substances changed with depth. Also, water levels in wells at different depths at essentially the same locations were measured to determine the vertical directions of groundwater flow. During the design of the groundwater extraction system, additional groundwater sampling will be done to make sure that the full extent of the groundwater contamination has been determined so that the needed extraction system can be designed.

COMMENT: "The alternatives that are presented as having been evaluated under the 'Summary of Alternatives' do not seem to address the full range of remedial alternatives that are required by the National Contingency Plan. Specifically, there does not appear to have been any evaluation of an alternative that addresses restoration of any affected ground water resources not immediately adjacent to the Pagel's Pit site. The lack of an evaluation of an aquifer restoration alternative seems unusual in light of the evidence presented that materials

have migrated from the Pagel's Pit site and the potential future use of ground water as a water supply is presented as a primary consideration in the baseline risk assessment."

RESPONSE: The groundwater contamination downgradient of the site that has been found will be addressed by the design and installation of the groundwater extraction system. Of course, the groundwater contamination in the southeast corner of the site will be addressed in the future.

COMMENT: "The elevated levels of conductivity and alkalinity that were reportedly found in the wells '...nominally upgradient and sidegradient from the landfill' could be an indication that the development of the landfill may have altered the local hydrologic regime with the landfill acting as a ground water recharge mound for the shallow aquifer. This is not an uncommon situation around municipal solid waste landfills. Such a condition might easily lead to the contamination identified in the southeast corner of the Pagel's Pit site. However, the statement that '[a] connection has not been established between the contamination on and near the Acme Solvents site and the contamination in the southeast corner of the Pagel's Pit site' could cause a reviewer to believe that there is reason to suspect a more significant connection between the Acme Solvents site and the southeast corner of the Pagel's Pit site than any data seems to support. The Acme Solvents PRPs do not believe such a connection exists and should not be implied."

RESPONSE: The groundwater contamination in the southeast corner is to undergo additional studies in order to further define it. In these studies, an attempt will be made to determine the source(s) of the contamination there. The ROD issued for the Acme Solvent site (signed on 12/31/90) also mentions these further studies.

The level of VOCs in the groundwater in the southeast corner of the site is higher than at any other place near the Pagel's Pit site. However, upgradient of the southeast corner is the highly contaminated well B4, located at the Acme Solvent site. There are elevated levels of VOCs in well G11 which is some distance away from the landfill in a sidegradient direction and which does not have elevated levels of specific conductance. These are some of the reasons that additional studies must be carried out to attempt to determine the source(s) of the contamination in the southeast corner. Since there is the possibility that the extent of the movement through the fractured bedrock of the contamination in well B4 has not been adequately characterized, this is one item that has to be looked at for the additional studies of the southeast corner of the Pagel's Pit site. There is no data that has been generated that shows that there could not be a connection between the contamination in the southeast

corner and the Acme Solvent site.

COMMENT: "The ground water control system described in the Proposed Plan seems to only address affected ground water in the unconsolidated deposits near the western boundary of the site. We are interested in how EPA plans to control any other affected ground water from the Pagel's Pit site, specifically the ground water that may be in the unconsolidated deposits beneath the site but not along the western boundary of the site and the fractured bedrock below the eastern quarter of the site."

RESPONSE: The groundwater at the site is moving generally toward the west and the contaminated groundwater moving in that direction will be intercepted at the western boundary of the site. Reduction in the amount of infiltration into the landfill and time should result in a decreased rate of contamination of the groundwater under the site. The extraction system will be operated until contamination in the groundwater leaving the site does not exceed the criteria specified.

COMMENT: "It may be incorrect to assume that the only source of leachate from the landfill is infiltration of precipitation through the landfill contents. Decomposition of the landfilled materials, in situ moisture content of the landfilled materials and precipitation that falls on the landfill contents during placement will all contribute to leachate formation. As a result it will be necessary to maintain and operate the leachate extraction system until leachate is no longer generated rather than until infiltration is controlled as stated in the Proposed Plan."

RESPONSE: It is recognized that infiltration is not the only source of leachate. The Proposed Plan does not say that the leachate extraction system will be maintained and operated "until infiltration is controlled". In the Proposed Plan in the "Time Required for Implementation" section, it says, "The leachate extraction system would be operated until rainwater no longer leached contaminants out of the wastes." In the "Summary of the Preferred Alternative" section, it says, "Ongoing extraction of gas and leachate until these substances no longer pose a problem should significantly reduce the levels of groundwater contamination."

B. Comments From the Pagel's Pit Site PRPs

These comments were submitted by a law firm that stated that it was representing the Pagel's Pit Landfill Participating PRPs. The comments were submitted in the form of a report that contained a considerable amount of background and claimed supporting material. In much of this, the work done for the remedial investigation and feasibility study was attacked. This

background and supporting material is generally not presented here; their original report is to be consulted for that. What follows are the comments made along with some of the supporting material.

In much of the background and claimed supporting material there are some misstatements of the facts as presented in the reports for the remedial investigation and feasibility study. There are some incorrect references and unsupported claims and conclusions. Generally, no attempt has been made here to comment on these.

COMMENT: "In addition, while the source of vinyl chloride contamination may not be particularly relevant to the effects of the contamination itself, the Pagel's Pit Landfill PRPs do point out that vinyl chloride is a biodegradation product of precisely those solvents, i.e., tetrachloroethene (PCE), trichloroethene (TCE), and 1,1- and 1,2-dichloroethenes (DCE), that were disposed of at the Acme Solvents site and detected in wells between the WRL and Acme Solvents sites. (RI, pp. 4-40 to 4-45). Therefore, any discussion of the hydrogeology in the WRL area that EPA decides to include in the Record of Decision must recognize this fact. (See Section 4 of the Remedial Investigation Report for a detailed discussion of groundwater releases from the Acme Solvents site and their degradation products)."

RESPONSE: There are chlorinated ethenes in many of the wells throughout the area. The remedial investigation did show that leachate from the landfill was affecting the groundwater. There are chlorinated ethenes in the leachate. The report for the remedial investigation did not consider all of the possible mechanisms that could have caused chlorinated ethene contamination in the groundwater. The report for the remedial investigation did not establish that none of the chlorinated ethene contamination in the groundwater in the neighborhood of the landfill could have come from the landfill. The remedial investigation and the feasibility study for the site must address the contamination that exists at the site. This is being done, except for the contamination in the southeast corner of the site.

What is requested to be included in the Record of Decision is not clear. Certainly not all of the results of the remedial investigation and the feasibility study can be put in the Record of Decision. It is generally more appropriate to use the limited room available for reporting the facts that have been determined rather than the speculation that has been put forth.

COMMENT: The baseline risk assessment was not properly done, and the risks for the future use of groundwater are not as great

as what has been determined. A very lengthy discussion is presented to back up this claim. One of the main arguments is that the toxicity values used should not have been used.

RESPONSE: The baseline risk assessment was generally done in accordance with the requirements of the Risk Assessment Guidance for Superfund (RAGS) (USEPA, March 1989 and December 1989). While someone may not agree with this guidance, this is what is to be used in the Superfund program. The critical toxicity values were taken mostly from the Integrated Risk Information System or the fourth quarter Health Effects Assessment Summary Tables, September 1990. These are the correct sources (see RAGS, Volume I, Part A, pp. 7-13ff).

COMMENT: Alternative 2 should be chosen. To say that this alternative would not provide adequate protection of human health and the environment has no merit.

RESPONSE: The baseline risk assessment showed that future possible use of the groundwater at the site as a water source will result in unacceptable risks to the users. Therefore, the groundwater must be addressed in any acceptable alternative. Alternative 2 does not address this groundwater.

Also, section 300.430(a)(1)(iii)(F) of the NCP states, "EPA expects to return usable ground waters to their beneficial uses whenever practicable, within a timeframe that is reasonable given the particular circumstances of the site. When restoration of ground water to beneficial uses is not practicable, EPA expects to prevent further migration of the plume, prevent exposure to the contaminated ground water, and evaluate further risk reduction." Alternative 2 would not prevent further migration of the plume.

COMMENT: Alternative 2 does not meet the ARARs because it leaves contaminated groundwater in place. There has been debate over the effectiveness of groundwater extraction and treatment. Support exists for an ARAR waiver because "compliance with such requirements is technically impracticable from an engineering perspective" and because "the remedial action selected [in this case planned closure] will attain a standard of performance that is equivalent to that required under the otherwise applicable standard, requirement, criteria, or limitation, through use of another method or approach". Thus Alternative 2 is consistent with the remedial requirements of Superfund.

RESPONSE: An ARAR waiver because compliance is technically impracticable is not supported. It is technically practicable to block the further migration of contaminated groundwater. An ARAR waiver because planned closure alone will result in the same performance as planned closure plus groundwater extraction

is not supported. Planned closure, which will not occur for a number of years, will not result in the relatively quick checking of the movement off the site of the contaminated groundwater that groundwater extraction will. Planned closure will probably not prevent the further transfer of leachate to the groundwater, only reduce the amount. Alternative 2 does not meet the remedial requirements of Superfund because it does not prevent migration of contaminated groundwater.

COMMENT: Alternative 2 plus institutional controls on new well development in contaminated zones and deed restrictions for property development provide reasonable measures to eliminate future risks.

RESPONSE: These institutional controls will not prevent the migration of the contaminated groundwater. There is a reasonable, cost-effective method for doing that, groundwater extraction, and no convincing reason for not using this method has been presented.

COMMENT: If USEPA does not adopt Alternative 2, then it should select Alternative 6 rather than Alternative 5. Alternative 6 would achieve each of USEPA's nine criteria. Alternative 6 is not as costly as Alternative 5.

RESPONSE: In the Record of Decision, USEPA and IEPA are choosing both Alternatives 5 and 6. The decision as to which should be used will be made during the design when more information is available for the decision. Each has some advantages and disadvantages, and these can better be weighed later.

COMMENT: USEPA is wrong in claiming that a connection between the contamination at the Acme Solvent site and the contamination in the southeast corner of the Pagel's Pit site has not been established. Measurable levels of VOCs have been found in the groundwater between the sites. The presence of significant levels of VOCs "upgradient of the WRL between the area south of the WRL site and west of Lindenwood Road and at well B4 at the Acme Solvents site" are indicated. The majority of the VOCs present in the area of the WRL are the same types of VOCs that were disposed of in the 1960's and early 1970's at the Acme Solvent site, and their degradation products.

RESPONSE: It is recognized that measurable concentrations of VOCs have been found between the Acme Solvent site and the southeast corner of the Pagel's Pit site. However, concentrations found between these areas are much lower than concentrations at the two areas. Thus, it is difficult to make a convincing case that the two areas are connected.

COMMENT: It is claimed that it is unfounded to say, as the Proposed Plan states, that the "chloride leachate plume" probably extends back to some of the southeast corner.

RESPONSE: Wells G109A, G110, and G114 in the southeast corner definitely have elevated levels of chloride. Wells B13, G113, and G113A probably have elevated levels of chloride. Thus, the statement in the Proposed Plan is supported.

COMMENT: The Proposed Plan is quoted with regard to the statement that if RCRA wastes have contaminated groundwater at the Pagel's Pit site, then RCRA ARARs would apply to the remediation of the groundwater. The commenter says that there is no evidence of RCRA wastes going to Pagel's Pit.

RESPONSE: The statement in the Proposed Plan about RCRA wastes did not state that RCRA wastes have gone to Pagel's Pit. What is being referred to here is the fact that listed wastes did go to the Acme Solvent site, and if some of the VOCs in the groundwater at the Pagel's Pit site are due to the contamination at the Acme Solvent site, then remedial action on the groundwater may be subject to RCRA ARARs.



217/782-6760

Refer to: 22018080001 -- Winnebago County
Pagel's Pit -- New Milford
Superfund/Compliance

June 26, 1991

Mr. David A. Ullrich, Director
Waste Management Division
United States Environmental Protection Agency, Region V
230 South Dearborn Street
Chicago, Illinois 60602

Dear Mr. Ullrich:

The Illinois Environmental Protection Agency (IEPA) is in receipt of the proposed Record of Decision (ROD) for the Pagel's Pit Superfund Site. IEPA has found that the selected remedy proposed by the United States Environmental Protection Agency (USEPA) is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate for this remedial action and is cost-effective.

Although IEPA has agreed in principle that the proposed remedy would effectively address contamination at this site, we are unable to concur on this ROD because of serious concerns over the manner in which a portion of the remedy would be administered. The section of the ROD concerning landfill closure and post-closure activities should be administered by IEPA since Illinois regulations govern. Because the State will not be participating in settlement negotiations addressing remediation due to the unacceptable role in which the State would be placed under the current Model CERCLA RD/RA Consent Decree, IEPA will not have the necessary approval rights over the landfill closure and post-closure activities when implementation is proposed. In effect, IEPA's ability to enforce Illinois regulations would be eliminated.

In the spirit of cooperation, IEPA will assist USEPA to the best extent possible in the implementation of the remedy. Please do not hesitate to contact us should the need arise.

Respectfully,

William C. Child

William C. Child, Manager
Division of Land Pollution Control
Illinois Environmental Protection Agency

cc: Mary Gade
Bernie Killian
Roger Kanerva
William Child
Gary King
Administrative Record

APPENDIX B
Statement of Work

**STATEMENT OF WORK FOR REMEDIAL DESIGN AND REMEDIAL ACTION
PAGEL'S PIT SITE
(Winnebago Reclamation Landfill)
WINNEBAGO COUNTY, ILLINOIS**

I. PURPOSE

The purpose of this remedial action is to fully implement the Record of Decision (ROD) for the Pagel's Pit site (Site) (Winnebago Reclamation Landfill) which was signed by the Regional Administrator of the United States Environmental Protection Agency (USEPA) on June 28, 1991. Settling Defendant is responsible for designing and implementing the remedial action at the Site and submitting deliverables specified in this Statement of Work (SOW) and the Consent Decree in a manner fully consistent with the USEPA Superfund Remedial Design and Remedial Action Guidance, the ROD, the Remedial Design/Remedial Action (RD/RA) Work Plan(s), as approved or modified by USEPA, any additional guidance provided by USEPA, and this SOW.

This Statement of Work sets forth the actions that are necessary for implementing the June 28, 1991 ROD. Although some of the requirements for an operating and closing landfill under the rules and regulations of the State of Illinois are included in this SOW, this SOW does not include all of the rules and regulations that apply to the operation and closure of this landfill in this SOW. The operators of the landfill must comply with all of the rules and regulations that do apply to their operation, including all conditions of their operating permit, whether or not they are specifically covered in this SOW.

In this SOW, the term "Settling Defendant" means the Class A Settling Defendant as defined in the Consent Decree.

II. DESCRIPTION OF THE REMEDIAL ACTION

Settling Defendant shall perform the remedial design and remedial action set forth in the ROD and further described in this SOW and the RD/RA Work Plan(s). The remedy shall be designed, executed, operated, and maintained to achieve the performance standards and cleanup standards set forth below. Cleanup standards have been set for the Site based on Federal, State, and local regulations, the baseline risk assessment done for the Site, and USEPA's "Risk Assessment Guidance for Superfund" (RAGS).

The selected remedy described in the ROD addresses all of the contamination at the Site and in the vicinity of the Site with the exception of the groundwater contamination in the southeast corner of the Site as indicated on the map attached as Appendix C to the Consent Decree. This area will be addressed in a separate

ROD in the future. The major components of the remedial action are as follows:

- A. Identification of Extent of Groundwater Contamination
- B. Groundwater Extraction and Treatment System
- C. Leachate Management System
- D. Landfill Gas Management System
- E. Final Cover System
- F. Control of Air Emissions
- G. Groundwater, Soil Gas, Leachate, Air, and Water Supply Monitoring
- H. Deed and Access Restrictions
- I. Alternative Water Supply

A. Identification of Extent of Groundwater Contamination

Settling Defendant shall perform sufficient additional sampling and studies to define the full extent of groundwater contamination and migration in the vicinity of the Site, except for migration in the vicinity of the southeast corner of the Site (the Southeast Corner) as indicated on the map attached as Appendix C to the Consent Decree (which will be addressed in a separate ROD in the future). The additional sampling and studies shall include, but are not limited to: (1) identification of the horizontal and vertical extent of contamination in the vicinity of the western boundary of the Site and to the west of this boundary; and (2) identification of the horizontal and vertical extent of contamination and migration to the northwest and to the southwest in the vicinity of the western boundary of the Site. Although this SOW does not address the Southeast Corner, the parties will coordinate sampling, studies, plans, and designs for the RD and RA activities under this SOW with any similar activities in the Southeast Corner to the extent that it is practical and cost efficient to do so and to the extent that it is consistent with the status of ongoing USEPA proceedings relating to the Southeast Corner. Any additional monitoring wells determined to be necessary for this identification shall be installed and sampled. The information gathered in this manner shall be used in the design of the groundwater extraction system.

B. Groundwater Extraction and Treatment System

1. Extraction System

Settling Defendant shall design, construct, operate, and maintain a groundwater extraction and treatment system at the Site. The purpose of the extraction system will be to extract groundwater in such a manner as to contain contaminated groundwater within the Site boundaries indicated on the map attached as Appendix C to the Consent Decree and prevent the migration of contaminated groundwater outside of the Site boundaries. The extraction system shall also be designed and operated so that any groundwater outside of the Site boundaries is cleaned up to meet the Groundwater Cleanup Performance Standards defined below. The extraction system will not at this time need to be designed to cover contamination in the vicinity of the southeast corner of the Site, as indicated on the map attached as Appendix C to the Consent Decree, since that area will be addressed in a separate ROD in the future.

The design of the groundwater extraction system shall include a determination of the number of extraction wells required, their locations, the pumping rates, and the method for operating the system. Consideration shall be given to alternate pumping of wells and pulse pumping in order to obtain an efficient method of operation that will prevent the migration of contaminated groundwater outside of the Site boundaries and attain Groundwater Performance Standards outside of those boundaries.

2. Groundwater Cleanup Performance Standards

In order to attain Groundwater Cleanup Performance Standards, Settling Defendant shall extract and treat the groundwater so that the concentrations of contaminants in the groundwater at all sampling points outside of the Site boundaries that are affected by the Site do not exceed the maximum contaminant levels (MCLs) and non-zero maximum contaminant level goals (MCLGs) for all contaminants for a period of three consecutive years, except that a cumulative carcinogenic risk of 1×10^{-5} and a cumulative hazard index (HI) of 1.0 shall be used for 1,1-dichloroethene, arsenic, and those contaminants without MCLs or non-zero MCLGs. If the maximum allowable concentration of a contaminant determined in the above manner is less than the naturally occurring background concentration,¹ then this background concentration shall be the

¹ Naturally occurring background level (concentration) shall have the meaning given this term in "Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A)" (December 1989). The selection of the points to be sampled for the determination of these background levels and the means to be used

maximum allowable concentration. Settling Defendant may propose an appropriate strategy for standards below detection limits using USEPA approved methods for analysis of drinking water. In making its proposal, Settling Defendant shall set forth the standards for its proposal along with the reasons for the proposal. USEPA shall either approve or disapprove the proposal. The cumulative carcinogenic risk and cumulative HI shall be calculated using the methods set forth in RAGS.

If, after full operation of the groundwater extraction and treatment system for a period of at least five years, and operation of the system following implementation of any and all modifications required by USEPA for at least three years, Settling Defendant believes that it is technically impracticable to achieve the Performance Standards set forth above, then Settling Defendant may petition USEPA to modify the Performance Standards, based on a demonstration, in accordance with the provisions of Section 121(d)(4)(C) of CERCLA, that compliance with the Performance Standards is technically impracticable from an engineering perspective.

Settling Defendant's petition shall include: 1) a detailed justification setting forth the technical basis for the claim that it is technically impracticable from an engineering perspective to achieve each such Performance Standard, including, but not limited to, a demonstration that contaminant concentrations have not shown a statistically significant difference in a minimum of four consecutive monitoring events (over a minimum period fully encompassing at least two years) and insignificant contaminant mass removal is being achieved by the groundwater extraction and treatment system; 2) proposed Alternate Performance Standard(s) which shall reflect the lowest concentration of each contaminant that it is technically practicable to attain from an engineering perspective; 3) a certification by Settling Defendant that all technically practicable measures to achieve the greatest possible reduction in concentration of each such contaminant have been implemented; and 4) a demonstration that the response action will attain a degree of cleanup of all contaminants and of control of further release which will ensure protection of human health and the

for the determination of these background levels shall be based on this guidance and the applicable Illinois regulations. In the first work plan that addresses groundwater sampling and analyses, Settling Defendant shall designate the sampling points and the methods that shall be used for the determination of these background levels that may be designated maximum allowable concentrations. The selection of the points to be used and the means for determining these background concentrations shall be subject to the approval of USEPA, after consultation with the State.

environment, including an evaluation of whether hydraulic containment is necessary after Alternate Performance Standards are achieved to prevent migration of contaminants exceeding Performance Standards.

Based on a review of the petition and any supporting information submitted by Settling Defendant, and any other relevant information, USEPA shall determine whether to modify any of the Performance Standards set forth above after notice and reasonable opportunity for the State, and the public, if necessary, to review and comment. If USEPA grants the Settling Defendant's petition, in whole or in part, Settling Defendant shall meet the Alternate Performance Standards set by USEPA. Such Alternate Performance Standards shall be made an enforceable part of this SOW and Consent Decree. Notwithstanding the approval of Alternate Performance Standards by USEPA, such Alternate Performance Standards are subject to modification by USEPA if monitoring data or technological improvements indicate, at any time, that a greater degree of cleanup is technically practicable from an engineering perspective, and any such modifications shall also be made an enforceable part of this SOW and Consent Decree.

USEPA's decisions and findings with respect to any petition under this subparagraph shall be deemed a determination regarding the adequacy and selection of the remedy for this Facility within the meaning of Section 113(j) of CERCLA, 42 U.S.C. Section 9613(j).

3. Treatment of Extracted Groundwater

Settling Defendant shall treat all extracted groundwater so that it meets National Pollutant Discharge Elimination System (NPDES) requirements for discharge into Killbuck Creek. The treatment system would consist of either an air stripping process or a carbon adsorption process or another treatment process that is approved by USEPA. The treatment system might include additional or supplemental treatment methods, such as the use of air injection/sparging, if approved by USEPA. USEPA will determine during design the process that will be used based on the effectiveness of the process in removing contaminants of concern from the extracted groundwater and on other appropriate factors such as the costs of construction, operation, and maintenance.

If carbon adsorption is selected, the carbon adsorption process shall contain a pretreatment system, consisting of a solids filter, and a two-vessel granular carbon adsorption system operating in a series mode. The pretreatment system will also contain a system for the partial removal of chlorinated organics in order to reduce the expected carbon usage rates if this is found to be necessary.

If air stripping is selected, the air stripping process will be similar to this carbon adsorption process. It will consist of a

solids filter and a stripping column which will be supplied with air by air blowers. The stripping column will be followed by a carbon polishing step or equally effective alternative approved by USEPA if this is found to be necessary to satisfy the NPDES discharge requirements. Air emissions from the stripper shall not cause an exceedance of the standards set forth in Section II.F. USEPA Office of Solid Waste and Emergency Response Directive 9355.0-28 shall be used as guidance in the design and operation of the air stripper.

Either treatment system will contain an inorganics removal system if this is found to be necessary to meet NPDES requirements for discharge into Killbuck Creek. Spent carbon shall be sent off-site for regeneration at an approved facility. Solid waste products from either process shall be disposed of in accordance with all applicable laws and regulations.

4. Shutdown of the Groundwater Extraction and Treatment System

Settling Defendant shall continue to operate the groundwater extraction and treatment system in order to contain contamination within the Site boundaries so that the Groundwater Cleanup Performance Standards are attained and will continue to be met. Settling Defendant may, under the circumstances described below, petition USEPA and the State to shut down some or all of the groundwater extraction and treatment systems.

If the petition is for the shutdown of some or all of the extraction wells being used for the containment of contaminated groundwater, Settling Defendant's petition shall include a detailed justification for the proposed shutdown demonstrating that the Groundwater Cleanup Performance Standards have been attained throughout the area outside of the Site boundaries controlled by these wells for a period of at least three consecutive years and will continue to be met following shutdown and that continuation of the operation of this portion of the groundwater extraction system is not necessary to protect human health and the environment or to protect against threats thereto. The petition shall take into account concentrations in the groundwater upgradient of the extraction area, modelling of any anticipated migration of contamination from within the Site to outside the Site boundaries as a result of any loss of containment of contamination from the shutdown of the groundwater extraction system, and any other available information. If the petition is for the shutdown of some or all of the extraction wells being used for the clean-up of a groundwater area, Settling Defendant's petition shall include a detailed justification for the proposed shutdown demonstrating that the Groundwater Cleanup Performance Standards have been attained throughout the area affected by these wells for a period of at least three consecutive years and will continue to be met

following shutdown and that continuation of the operation of this portion of the groundwater extraction system is not necessary to protect human health and the environment or to protect against threats thereto. If the petition is for the shutdown of some or all of the extracted groundwater treatment system, Settling Defendant's petition shall include a detailed justification for the proposed shutdown that includes a demonstration that the NPDES discharge requirements will continue to be met following the proposed shutdown and that continuation of operation of this portion of the treatment system is not necessary to protect human health and the environment or to protect against threats thereto.

Based upon the petition and any other relevant information, USEPA shall issue a written determination stating whether any or all of the groundwater extraction and treatment system may be shut down. In the event of a shutdown of any portion of the groundwater extraction and treatment system, Settling Defendant shall continue monitoring groundwater in the vicinity of the Site in accordance with Section II.G of this SOW and the discharge from the treatment system if some or all of this system is still operating in accordance with the requirements of the NPDES permit. Upon a finding by USEPA that resumption of some or all of the groundwater extraction or treatment is necessary to meet Groundwater Cleanup Performance Standards or NPDES discharge requirements or to protect human health or the environment or to protect against threats thereto, the Settling Defendant shall resume the necessary portion of groundwater extraction and treatment and shall continue to do so until a new petition for shutdown meeting the requirements of this Section is approved by USEPA.

C. Leachate Management System

During the period of operation of the landfill prior to closure of the landfill under applicable Illinois regulations, the present leachate extraction system shall be operated so as to minimize the amount of leachate in the landfill. In addition, during this period, Settling Defendant shall convert the present system to the final leachate management system that will be operated following closure.

Within three months following the installation of the final cover system and the gas extraction wells in any portion of the landfill, installation of the final leachate management system shall be completed as described below in that portion of the landfill and operation of the final leachate management system shall commence in that portion of the landfill. In those portions of the landfill where the final leachate management system has not yet been installed, temporary pumps shall be used in gas wells and manholes to extract the leachate and transfer it to the local holding area. The interim system shall be operated so as to minimize the amount of leachate in the landfill.

1 The final leachate management system shall consist of an
2 extraction system and a pretreatment and transport system and
3 shall control the amount of leachate present to the lowest level
4 that is technically practicable. The manholes connected to the
5 collection pipes in the base of the landfill and the gas
6 extraction wells, either newly installed wells or existing wells,
7 shall be used in the final leachate management system to the
8 extent necessary. Permanent pumps equipped with automatic
9 controls shall be installed for the extraction of the leachate.

10 The final leachate management system is to be designed,
11 constructed, operated, and monitored in accordance with the
12 applicable or relevant and appropriate requirements (ARARs) and
13 standards identified in the ROD, including all applicable
14 Illinois laws. These laws include, but are not limited to, 35
15 IAC 811.309 and any successor regulations that apply to this site
16 and are not less stringent than these regulations. In
17 determining compliance with applicable Illinois laws and
18 regulations generally applicable to the site and to non-hazardous
19 waste landfills, the parties intend that the Illinois
20 Environmental Protection Agency (IEPA) will be consulted as to
21 its view regarding applicable State laws and regulations.

22 At all times during the operation of the present, interim, and
23 final leachate management system, Settling Defendant shall make
24 arrangements for sending the leachate to the publicly owned
25 treatment works for treatment, as is presently done, unless a
26 change in the applicable rules or regulations prohibit this or an
27 equally effective alternative treatment method meeting all
28 applicable requirements is proposed by the Settling Defendant and
29 approved by USEPA. Settling Defendant shall pretreat the
30 extracted leachate at the Site with the aeration system that has
31 been used, or an approved modification thereof. The pretreatment
32 system shall be modified to the extent necessary to meet the
33 pretreatment and other requirements of the POTW. The leachate
34 shall be delivered to the POTW through a sanitary service line
35 from the Site that is connected to an existing sanitary sewer.

36 The entire system shall use automatic controls to the maximum
37 extent practicable. At all times during the operation of the
38 present, interim, and final leachate management system, Settling
39 Defendant shall cooperate fully with the POTW and shall
40 communicate with them frequently to ensure that any indications
41 that the leachate is causing problems at the POTW or that
42 leachate will no longer be allowed to be sent to the POTW will be
43 identified at the earliest possible moment.

44 Settling Defendant shall continue to operate the leachate
45 management system during the performance of the Remedial Action
46 and after it has performed the Remedial Action and attained
47 Performance Standards. Settling Defendant may, at any time
48 following the issuance of the Certification of Completion of
49
50
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Remedial Action pursuant to paragraph 46 of the Consent Decree, petition USEPA and the State to shut down the leachate management system. Settling Defendant's petition shall include a detailed justification for the proposed shutdown demonstrating that continuation of the operation of the leachate management system is not necessary to comply with the requirements of 35 IAC 811.309, to meet Groundwater Cleanup Performance Standards, or to protect human health or the environment or to protect against threats thereto. Based upon the petition and any other relevant information, USEPA, after consultation with the State as to whether or not continued operation would be required under State law, shall issue a written determination stating whether or not the leachate management system may be shut down. In the event of a shutdown of the leachate management system, Settling Defendant shall continue monitoring in the vicinity of the Site in accordance with Section II.G of this SOW. Upon a finding by USEPA that resumption of the operation of the leachate management system is necessary to comply with applicable Illinois regulations, to meet Groundwater Cleanup Performance Standards outside the Site boundaries, or to protect human health or the environment or to protect against threats thereto, the Settling Defendant shall resume operation of the leachate management system.

D. Landfill Gas Management System

During the period of operation of the landfill prior to closure of the landfill under applicable Illinois regulations, the present landfill gas management system or the landfill gas system modified to convert it to the final system as described below shall be operated so as to minimize the amount of landfill gas present in the ground outside of all parts of the waste disposal area (including the Southeast Corner) or being discharged to the ambient air. (The waste disposal area is that area with a liner system in which solid wastes have been disposed of.)

Settling Defendant shall design, construct, operate, and maintain a landfill gas management system consisting of an extraction system and a system for either using the gas as a fuel source, as is presently done, or disposing of the gas through flaring. The current landfill gas extraction system using wells within the landfill shall be upgraded. New wells shall be installed in the areas of the landfill where no wells presently exist. In the area of the landfill where gas wells currently exist, the wells may either be incorporated into the final system with necessary modifications or be replaced as the elevation of the landfill is raised. Any wells in the gas extraction system that are to be also used for leachate extraction shall extend to within 5 to 10 feet of the liner. The designed well spacing shall minimize the amount of gas not captured in the waste area. A perimeter gas management system shall also be installed if USEPA determines that the active landfill gas extraction system does not

adequately prevent the movement of the landfill gas to the area outside of the waste disposal area.

Settling Defendant shall equip the extraction system with sufficient blower capacity, and spare capacity, to properly extract the landfill gas being generated. Any wastes generated from this treatment system, such as condensed liquids, shall be properly disposed of.

The landfill gas management system is to be designed, constructed, operated, and monitored in accordance with the ARARs and standards identified in the ROD, including all applicable Illinois laws. These laws include, but are not limited to, 35 IAC 811.311 and any successor regulations that apply to this site and are not less stringent than these regulations. In determining compliance with applicable Illinois laws and regulations generally applicable to the site and to non-hazardous waste landfills, the parties intend that the IEPA will be consulted as to its view regarding applicable State laws and regulations.

Settling Defendant shall continue to operate the gas management system during the performance of the Remedial Action and after it has performed the Remedial Action and attained Performance Standards. Settling Defendant may, at any time following the issuance of the Certification of Completion of Remedial Action pursuant to paragraph 46 of the Consent Decree, petition USEPA and the State to shut down the gas management system. Settling Defendant's petition shall include a detailed justification for the proposed shutdown demonstrating that continuation of the operation of the gas management system is not necessary to comply with the requirements of 35 IAC 811.311, to meet Groundwater Cleanup Performance Standards, or to protect human health or the environment or to protect against threats thereto. Based upon the petition and other relevant information, USEPA, after consultation with the State as to whether or not continued operation would be required under State law, shall issue a written determination stating whether or not the gas management system may be shut down. In the event of a shutdown of the gas management system, Settling Defendant shall continue monitoring in the vicinity of the Site in accordance with Section II.G of this SOW. Upon a finding by USEPA that resumption of the operation of the gas management system is necessary to comply with applicable Illinois regulations, meet Groundwater Cleanup Performance Standards outside the Site boundaries, or to protect human health or the environment or to protect against threats thereto, the Settling Defendant shall resume operation of the gas management system.

E. Final Cover System

During the remaining years of its operation, Settling Defendant

shall operate the landfill in full compliance with the applicable cover regulations of the State of Illinois, the conditions of the operating permit, and any other regulations that apply with regard to waste placement. Prior to closure, Settling Defendant shall sequence the waste placement operations in any unit or part of a unit so as to allow the wastes to be built up to the planned final grade for a final cover system. Settling Defendant shall ensure that no more than 25 % of the landfill area (projected area) shall have had the final lift placed and be covered by intermediate cover, as defined in 35 IAC 811.313, at any time.

Settling Defendant shall design, construct, and maintain a final cover system for any closed unit that will meet the requirements of 35 IAC Part 811 or any subsequently promulgated applicable regulations that are more protective. Based upon the requirements of 35 IAC Part 811, the cover shall have the following characteristics: (1) consist of a low permeability layer followed by a final protective layer; and (2) have final slopes at a grade capable of supporting vegetation, limiting erosion, and preventing the accumulation of water on the cover. The construction of the final cover system on a unit shall commence no later than 60 days after placement of the final lift of solid wastes, unless delayed by weather. The design, construction, and maintenance of the final cover system shall comply with the requirements of the permits which have been granted to the landfill.

The final cover system is to be designed, constructed, operated, and monitored in accordance with the ARARs and standards identified in the ROD, including all applicable Illinois laws. These laws include, but are not limited to, 35 IAC 811.313 and any successor regulations that apply to this site and are not less stringent than these regulations. In determining the compliance with applicable Illinois laws and regulations generally applicable to the site and to non-hazardous waste landfills, the parties intend that the IEPA will be consulted as to its view regarding applicable State laws and regulations.

F. Control of Air Emissions

At all times during the performance of the remedial action, Settling Defendant shall ensure that air emissions do not exceed a cumulative cancer risk of 1×10^{-5} at the nearest downwind receptor, using risk calculation methods set forth in RAGS. In addition, the air emissions shall not exceed any Federal, State, or local regulations. Residuals from air emissions control processes shall be treated and/or disposed of in accordance with Resource Conservation and Recovery Act (RCRA) hazardous waste regulations.

G. Groundwater, Soil Gas, Leachate, Air, and Water Supply Monitoring

Settling Defendant shall design, install, operate, and maintain monitoring systems for the following media: 1) groundwater; 2) soil gas; 3) leachate; 4) air and water. In all cases, the monitoring systems shall comply with the State of Illinois regulations for an operating and, eventually, a closed solid waste landfill. The designs and plans for all monitoring systems are subject to USEPA approval. USEPA is to be notified at least fourteen days prior to any sampling activities required under this Section of this SOW. Monitoring shall not be discontinued unless the requirements of this SOW and paragraph 47 of the Consent Decree are complied with.

1. Groundwater

Settling Defendant shall design the groundwater monitoring system to detect changes in the concentrations of contaminants in the groundwater in the area outside the Site boundary depicted on Appendix C to the Consent Decree other than the area in the Southeast Corner. The groundwater downgradient of the extraction zone shall be monitored to determine that the extraction system is preventing the movement of contaminated groundwater beyond the Site boundaries. The groundwater around the entire waste boundary, including the areas between the waste boundary and the barrier formed by the extraction wells, shall be monitored to determine whether the groundwater is being contaminated by releases from the waste disposal area. Background groundwater quality shall be monitored. Each time the groundwater monitoring wells are sampled, the elevations of the water in the wells must be measured.

2. Soil Gas

Settling Defendant shall design a soil gas monitoring system that shall include gas monitoring devices around the waste disposal area at locations and elevations capable of detecting landfill gas migrating between the ground surface and the elevation of the bottom of the landfill liner system. The purpose of these devices is to determine the effectiveness of the gas extraction system.

3. Leachate

Settling Defendant shall collect and analyze representative samples of leachate from the waste disposal area in order to detect changes in the leachate. In addition to this monitoring, all leachate monitoring required by the local publicly owned treatment work (POTW) to which the leachate is being discharged shall be performed.

4. Air

Settling Defendant shall sample at least three ambient air monitoring locations downwind from the edge of the waste disposal unit (on the site and no more than 100 feet from the edge of the waste disposal area). If any pretreatment of leachate occurs at the site that could result in the transport of volatiles into the air and this pretreatment is not done on the waste disposal area, at least one additional air monitoring location that is downwind of this pretreatment area shall be sampled. If the treatment of extracted groundwater could result in transport of volatiles into the air, Settling Defendant shall sample at air monitoring location(s) downwind of the treatment system. Sampling shall only be done when the average wind velocity is less than five miles per hour. If releases from the waste disposal area are the only releases being monitored, Settling Defendant shall only analyze for the parameters required by the State of Illinois regulations. If emissions from treatment units are being monitored, in addition to the parameters required by the State of Illinois, volatile organic compounds (VOCs) in the air shall also be analyzed for. The results from the analyses for VOCs are to be used to determine whether the air emission standards set forth in the ROD and in Section II.F of this SOW are being attained.

5. Water Supply

Settling Defendant shall sample and analyze both raw water and treated water for any water treatment units that are installed as the result of a requirement to furnish an alternative water supply. This sampling and analysis shall be done at least quarterly for the purpose of determining that the discharge from the treatment unit meets all requirements for a drinking water supply. If some other alternative water supply is furnished, such as water through a pipe line or water in containers, Settling Defendant shall provide the necessary assurances that this alternative water supply is meeting all the requirements for a drinking water supply. If the water supply well is not abandoned, the water from the well shall be sampled and analyzed quarterly. A copy of the results of all analyses shall be furnished to the principal user of the alternate water supply.

H. Remedy Component Maintenance and Access Restrictions

Settling Defendant shall provide all necessary maintenance for all remedial components. Settling Defendant shall restrict access and provide any necessary security to ensure that the integrity of the final cover system is not compromised and there is no interference with the operation and maintenance of extraction, treatment, transport, and monitoring systems required by this remedial action.

I. Alternate Water Supply

If USEPA determines that the source of a property's water supply contamination might be due to Pagel's Pit, Settling Defendant shall provide a temporary water supply approved by USEPA and shall conduct an investigation to determine if the source of the contamination in the property's water supply is Pagel's Pit. This investigation must be completed within four months unless the time period is extended by agreement of the parties. If, based on this investigation and other relevant data and information, USEPA determines that the source of the contamination in a property's water supply is Pagel's Pit and an alternate water supply is needed, Settling Defendant shall provide an alternate water supply suitable for long-term use and approved by USEPA. An alternate water supply will be required if the existing water supply contains contaminants at levels exceeding a cumulative carcinogenic risk of 1×10^{-5} or contains any contaminant which exceeds a maximum contaminant level (MCL) or non-zero maximum contaminant level goal (MCLG) set under the Safe Drinking Water Act, except that any concentration determined in this manner shall not be set below the naturally occurring background level (the requirements). The alternate water supply shall be approved by USEPA and shall supply water that meets the requirements listed here. Settling Defendant shall provide all necessary operation, maintenance, and monitoring of the alternate water supply. The alternate supply shall be provided at least until the original supply meets the requirements listed here for a period of three consecutive years. If the original water supply is utilized again, it shall be monitored quarterly for at least five years to confirm that it continues to meet the requirements listed here.

III. SCOPE OF THE REMEDIAL ACTION

Settling Defendant shall design, construct, operate, maintain, and monitor the remedial action for the Pagel's Pit site by performing each of the tasks described below. All plans and other documents submitted to USEPA pursuant to the Consent Decree and this SOW shall be governed by the approval procedures of the Consent Decree. RA Work Plans generally will be part of the final design plans.

A. Task 1: RD/RA Work Plan Development

Settling Defendant shall submit to USEPA for review and approval the RD/RA Work Plan which shall describe how all components of the remedial action will be designed and constructed. In addition, Settling Defendant shall submit to USEPA and the State for review and approval Remedial Design Work Plans for the designs of the various components of the Remedial Action at the Site. The RD/RA Work Plan or the Remedial Design Work Plans

shall include the plans listed for Task 1. In addition, the RD/RA Work Plan or the Remedial Design Work Plans shall include descriptions of the qualifications, responsibilities, and authorities of all key personnel and organizations involved with implementation of the RD/RA.

1. Site Access and Permitting Plan

A Work Plan shall include either documentation that access agreements for both the Site and off-site areas where remedial action will be performed have been obtained or a plan for obtaining such agreements prior to initiation of the RD/RA. The agreements must provide for all necessary access and such access must be for the duration of the RD/RA and include continued rights of access for all operation and maintenance. The Work Plan shall also include a comprehensive list of all permits necessary for the performance of the remedial action as well as procedures and schedules for acquiring these permits.

2. Quality Assurance Project Plan

Settling Defendant shall develop site-specific quality assurance project plans (QAPPs) for the sampling and analysis required for pre-design studies, monitoring, and related testing. A QAPP shall be prepared in accordance with the Consent Decree, USEPA's Interim Guidelines and Specifications for Preparation of Quality Assurance Project Plans (QAMS-005/80), and all other guidance identified by USEPA. Settling Defendant or its contractor(s) shall meet with USEPA representatives to discuss the contents of the QAPP prior to its submission.

3. Sampling Plan

Settling Defendant shall develop site-specific sampling plans for the samplings and analyses that will be performed for the pre-design studies, monitoring, and related testing. A sampling plan shall specify and outline all necessary activities to obtain the data required. It shall contain an evaluation explaining what additional data are required. It should clearly state sampling objectives; necessary equipment; sample types, locations, and frequency; analyses of interest; and a schedule stating when events will take place and when deliverables will be submitted.

4. Site Safety Plan

Settling Defendant shall develop site-specific safety plans designed to protect on-site personnel and area residents from any and all physical, chemical, and other hazards which might arise out of the performance of the pre-design studies and the remedial design and remedial action activities. A safety plan shall follow all USEPA guidances concerning health and safety and meet all Occupation Safety and Health Administration (OSHA)

requirements set out in 29 C.F.R. 1910.120 (51 FR 45654).

5. Pre-Design Studies Plan

Settling Defendant shall develop site-specific plans for the pre-design studies described in Task 2 below. The principal personnel involved in the development of the program for pre-design studies shall meet with USEPA representatives prior to submitting a plan in order to discuss program elements, including objectives, resources, communication channels, and roles.

B. Task 2: Pre-Design Studies

Settling Defendant shall perform pre-design studies to supplement the available technical data in order to obtain the information necessary to fully implement the remedial action. These pre-design studies shall include, at a minimum:

- Identification of the extent of groundwater contamination in the vicinity of the western site boundary exceeding the cleanup standards set forth in Section II;
- Treatability studies for groundwater treatment, if USEPA determines such studies to be necessary; and
- Any additional studies necessary for proper design of any elements of the remedial action.

At the direction of USEPA, Settling Defendant shall furnish all services needed for these studies, including field work, materials, supplies, labor, equipment, data procurement, and data analysis. Sufficient sampling, testing, and analysis shall be performed to fully support the design of the systems needed for the remedial action.

Settling Defendant shall submit to USEPA a final report or reports which include all data collected during the studies, the results of the pre-design studies, and recommendations based on the results of the studies.

C. Task 3: Remedial Design

Settling Defendant shall prepare construction plans and specifications needed for the implementation of the remedial action as described in the ROD and this SOW. All plans and specifications shall be developed in accordance with USEPA's Superfund Remedial Design and Remedial Action Guidance (USEPA Office of Solid Waste and Emergency Response (OSWER) Directive No. 9355.0-4A) and shall demonstrate that the remedial action will meet all objectives of this SOW and the ROD, including all Performance Standards. Each element of the remedial action may be designed and handled separately. One or more elements may be combined if convenient or most efficient. Settling Defendant shall meet with USEPA, as necessary, to discuss design issues.

1. Content of Design Documents

Settling Defendant shall develop design plans and specifications, which, where applicable, shall include, but not be limited to, the following:

- a. Discussion of the design strategy and the design basis, including:
 - Compliance with all applicable or relevant and appropriate requirements; and
 - Minimization of adverse effects to the environment and to human health.
- b. Discussion of all significant technical factors including:
 - Use of currently accepted environmental control measures and technologies; and
 - The constructability of the design.
- c. Discussion of the assumptions made and detailed justifications for these assumptions.
- d. Discussion of possible sources of error and possible operation and maintenance problems.
- e. Detailed drawings for the proposed design including:
 - Qualitative flow sheets; and
 - Quantitative flow sheets.
- f. Tables listing all necessary equipment and equipment specifications.
- g. Tables giving material and energy balances.
- h. Appendices, including:
 - Sample calculations (one example presented and explained clearly for significant or unique design calculations);
 - Derivation of equations essential to understanding the report; and
 - Results of laboratory or field tests.

In addition, the design packages shall contain the plans listed and described in Sections III.C.2 and III.C.3 below.

2. Design Phases

Settling Defendant shall develop and submit to USEPA for approval construction plans and specifications to fully implement the remedial action. Settling Defendant shall develop and submit to USEPA for approval the detailed design in up to four phases, as follows, and as described below: preliminary design package (30 percent complete), intermediate design (60 percent complete, if

required by USEPA), prefinal design (95 percent complete, if required by USEPA) and final design (100 percent complete). The following shall also be included in the preliminary, intermediate, prefinal and final design submittals: a list of the permitting authorities; a list of required construction/operating permits; an estimate of the time required by the permitting agencies to process the permit application(s); a list of the monitoring and/or compliance testing requirements; and a list of all regulations governing any aspect of the remedial design or remedial action.

a. Preliminary Design

The preliminary design shall describe the technical requirements of the remedial action in a manner sufficient to allow a meaningful review to determine whether the final design will provide for an acceptable remedial action or remedial action component.

b. Intermediate Design

The intermediate design shall fully address all comments made to the preliminary design and shall include: the first draft of the construction quality assurance plan, operation and maintenance (O&M) QAPP, and field sampling plan (FSP); a draft O&M plan; the design analysis; and plans and specifications for the remedial action. USEPA may waive the requirement for an intermediate design if it determines that the preliminary design sufficiently addresses the technical requirements of the remedial action to provide the basis for an acceptable prefinal design.

c. Prefinal and Final Design

The prefinal and final designs shall fully address all comments made to the preceding design submittal. USEPA may waive the requirement for a prefinal design if the previous design submittal has demonstrated that such a design is not necessary. If a bid advertisement is to be placed, the final design shall include reproducible drawings and specifications suitable for bid advertisement. The prefinal and final design packages shall include, at a minimum, the construction quality assurance plan, O&M QAPP, FSP, O&M plan, the design analysis, final construction drawings and specifications, construction schedule, and cost estimate.

Settling Defendant shall ensure that drawings are consistent with the specifications throughout the prefinal and final designs. The final design shall sufficiently describe the technical requirements of the remedial action so as to permit meaningful review to determine whether the remedial action or the element of the remedial action will accomplish the objectives of the ROD and this SOW. Supporting data and documentation shall be provided

with the design documents which defines the functional aspects of the project. Construction drawings shall be clear and well organized. Design analysis and calculations shall be included with the submission.

The cost estimate shall include both capital costs and operation and maintenance costs. The final cost estimate shall be submitted with the final design.

3. Plans to be Submitted with Design Phases

Settling Defendant shall submit a draft construction quality assurance plan, FSP, and safety plan for the remedial action or for any element of the remedial action with the design phases specified above. Final versions of these plans shall be submitted prior to the start of construction, in accordance with the construction schedule. In addition, the following plans shall be submitted in draft form during remedial design and in final form during remedial action:

a. Operation and Maintenance Plan

Settling Defendant shall develop and submit to USEPA for approval an operation and maintenance (O&M) plan to provide for the long-term operation, maintenance, and monitoring of the remedial action. The plan shall describe the following: normal operation and maintenance; potential operating problems; routine monitoring and testing; and long term operation and maintenance. The O&M Plan shall cover record retention procedures and reporting schedules.

As part of the O&M Plan, Settling Defendant shall establish a monitoring program in order to assess whether remedial activities comply with the requirements of the Consent Decree, this SOW and the ROD and whether new or further corrective measures need to be taken at the Site. The O&M Plan will describe the records that will be developed for the operation and maintenance program.

b. Construction Quality Assurance Plan

Settling Defendant shall develop a construction quality assurance plan which describes at least the following: responsibilities and authorities of key personnel and organizations; qualifications of key personnel; all necessary inspection activities; all necessary sampling requirements; data management practices and data interpretation methods; corrective measures; and methods of documentation.

4. General Requirements for Design

The technical specifications governing all treatment systems shall include any necessary contractor requirements for

providing: appropriate service visits by experienced personnel to supervise the installation, adjustment, startup, and operation of the system; and appropriate operational procedures training.

Settling Defendant shall demonstrate that the components of the remedial action will comply with Federal, State and local regulations. All applicable or relevant and appropriate requirements identified in the ROD shall be analyzed and incorporated into the design.

Settling Defendant shall obtain, complete, and tender all required applications to the appropriate permitting authorities. Copies of all correspondence from permitting agencies which either describe permit requirements or indicate that no permits are necessary, shall be furnished to USEPA.

D. Task 4: Remedial Action

Following approval by USEPA of the final design(s), Settling Defendant shall construct and operate all elements of the remedial action in accordance with the approved final design plan(s), specifications, and schedule(s).

1. Preconstruction Inspection and Meeting

Before construction of any element of the remedial action begins, a preconstruction meeting and inspection shall be held at the site. The purpose of this inspection and meeting is to identify and resolve any potential problems with the action. This meeting and inspection will involve, at a minimum, USEPA and the Settling Defendant's Project Coordinator and Remedial Action Contractor(s).

2. Construction and Operation

Settling Defendant shall construct and operate all elements of the approved remedial action in accordance with the approved remedial design documents, plans, and schedules.

3. Prefinal Inspection

When Settling Defendant contends that it has completed the construction of any element of the remedial action (or, in the case of the cover system, an agreed-upon portion of the cover) and prior to its submission of the Construction Completion Report, a prefinal inspection shall be held at the site. This inspection will include USEPA and the Settling Defendant's Project Coordinator and Remedial Action Contractor(s).

4. Final Inspection

If any deficiencies in the construction and operation of the

2 element of the remedial action are identified in the prefinal
inspection, Settling Defendant shall correct the deficiencies
prior to the final inspection. This inspection shall include
USEPA and the Settling Defendant's Project Coordinator and
Remedial Action Contractor(s). If the final inspection
6 demonstrates that no deficiencies in the element of the remedial
action remain, Settling Defendant may submit the Construction
Completion Report.

10 5. Long-Term Operation and Maintenance

12 Settling Defendant shall continue to perform long term operation
and maintenance of the elements of the remedial action in
14 accordance with the approved plans, specifications, and
schedules.

16 E. Task 5: Schedule and Reporting

18 1. Progress Reports

20 Settling Defendant shall, at a minimum, provide USEPA with
monthly progress reports during the design and construction
22 phases and quarterly progress reports during operation and
maintenance activities. These reports shall provide:

- 24 a. A description of the actions which have been taken towards
achieving compliance with the Consent Decree and SOW, with
copies of appropriate supporting documentation attached;
- 26 b. A description of and estimate of the percentage of the RD/RA
completed, including a description of unresolved delays
encountered or anticipated delays that may affect the
32 project schedule;
- 34 c. A summary of all results of sampling, testing, laboratory
analyses, and all other data which was received by Settling
Defendant and which has passed quality assurance and quality
control procedures during the reporting period, as well as
copies of daily reports (if requested) and inspection
36 reports;
- 38 d. A description and justification of all deviations from the
approved work plans, plans, or specifications;
- 40 e. A description of all problems or potential problems
encountered during the reporting period, and actions being
taken to correct the problems;
- 42 f. A description of all relevant contacts with representatives
of the local community, public interest groups, or state
44 government;

- g. A description of any relevant changes in personnel; and,
- h. A description of the projected work, including all documents to be submitted during the next reporting period.

2. Construction Completion Report

After the final inspection of any element of the remedial action, Settling Defendant shall submit a Construction Completion Report to USEPA. The report shall certify that the construction has been completed in a manner consistent with the design specifications, and that the components of the element are performing adequately. The report shall include, but not be limited to, the following elements:

- a. Brief description of the remedial action component and its function;
- b. Description and justification of any modifications to design plans and specifications; and
- c. Certification that the remedial action component is operational.

3. Schedule

Settling Defendant shall submit to USEPA for approval a schedule for the remedial design and remedial action as part of the RD/RA Work Plan. The schedule shall include specific dates for performance of the remedial design and remedial action tasks required under the Consent Decree and this Statement of Work, including dates for submittal of all documents, and dates for planned sampling and monitoring activities. Where specific dates cannot be given because they are dependent upon the operations of the facility, dates shall be given that are related to milestones in the operation of the facility, and approximate dates for these milestones shall be given. This schedule shall be supplemented by additional schedules furnished as parts of the Remedial Design Work Plans that are submitted.

The proposed schedule shall provide at a minimum as follows. Design of the groundwater extraction and treatment systems shall be completed no later than two years following the lodging of the Consent Decree; prior to the completion of the design of these systems, the extent of the groundwater contamination in the vicinity of the western boundary of the site shall be determined. The installation of these systems and the commencing of their operations shall be done as soon as possible after the design has been completed, but in no case later than one year following the approval of the design. All monitoring systems associated with the groundwater extraction and treatment system, as described in Section II above, shall be installed and be operational by the

time the extraction and treatment system is operational. The other elements of the remedial action set forth in Section II above which involve construction shall be installed in a timely manner, as the filling of the waste area to its permitted elevations allows. All time constraints required by the operating permit and the State of Illinois regulations for solid waste landfills shall be complied with.

SOW for RD/RA
Pagel's Pit Site

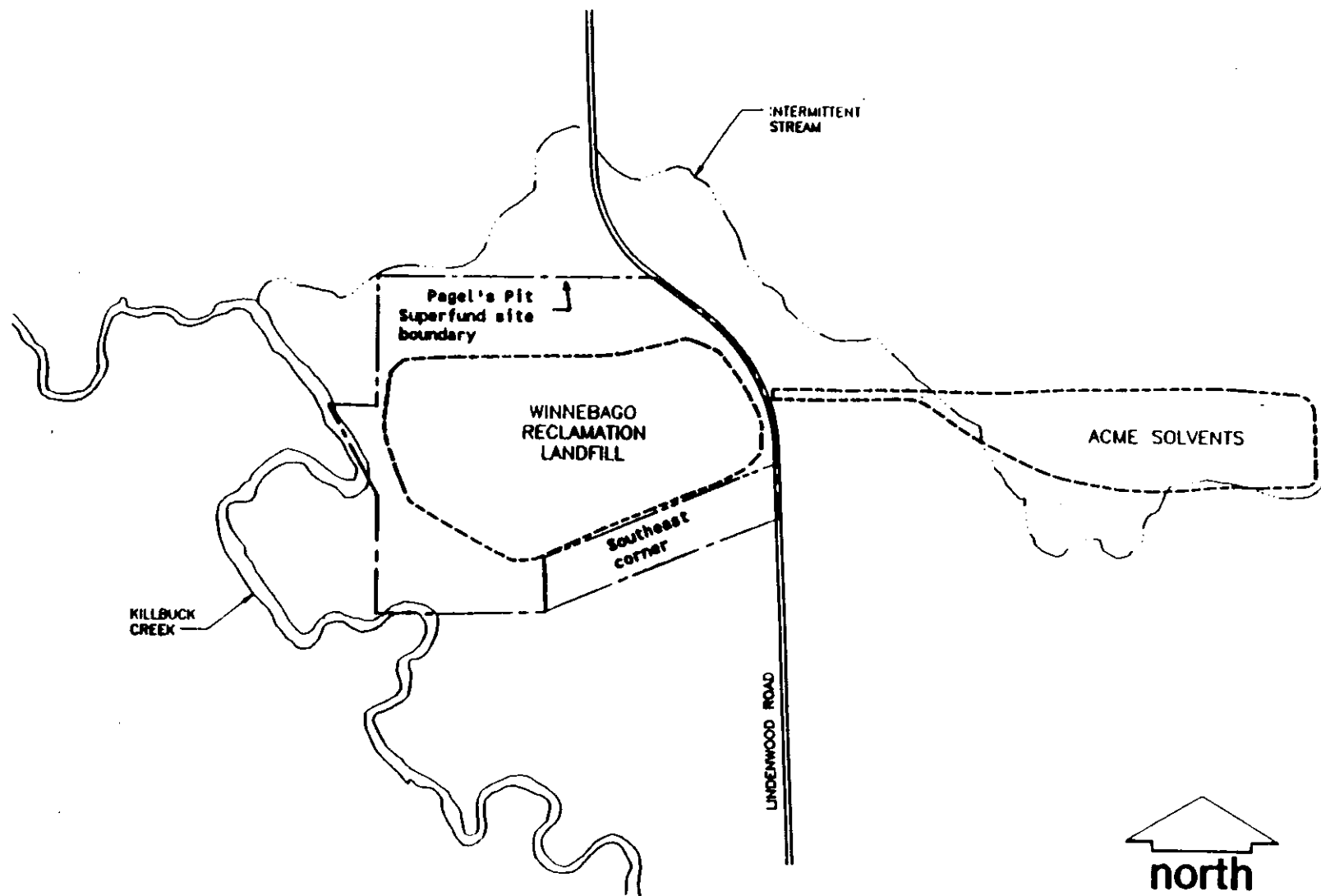
Table of Contents

I. PURPOSE	1
II. DESCRIPTION OF THE REMEDIAL ACTION	1
A. Identification of Extent of Groundwater Contamination	2
B. Groundwater Extraction and Treatment System	3
1. Extraction System	3
2. Groundwater Cleanup Performance Standards	3
3. Treatment of Extracted Groundwater	5
4. Shutdown of the Groundwater Extraction and Treatment System	6
C. Leachate Management System	7
D. Landfill Gas Management System	9
E. Final Cover System	10
F. Control of Air Emissions	11
G. Groundwater, Soil Gas, Leachate, Air, and Water Supply Monitoring	12
1. Groundwater	12
2. Soil Gas	12
3. Leachate	12
4. Air	13
5. Water Supply	13
H. Remedy Component Maintenance and Access Restrictions	13
I. Alternate Water Supply	14
III. SCOPE OF THE REMEDIAL ACTION	14
A. Task 1: RD/RA Work Plan Development	14
1. Site Access and Permitting Plan	15
2. Quality Assurance Project Plan	15
3. Sampling Plan	15
4. Site Safety Plan	15
5. Pre-Design Studies Plan	16
B. Task 2: Pre-Design Studies	16
C. Task 3: Remedial Design	16
1. Content of Design Documents	17
2. Design Phases	17
a. Preliminary Design	18
b. Intermediate Design	18
c. Prefinal and Final Design	18
3. Plans to be Submitted with Design Phases	19
a. Operation and Maintenance Plan	19
b. Construction Quality Assurance Plan	19
4. General Requirements for Design	19
D. Task 4: Remedial Action	20
1. Preconstruction Inspection and Meeting	20

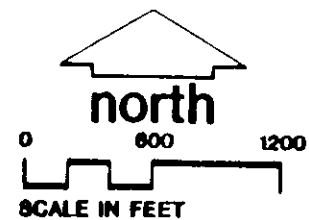
2.	Construction and Operation	20
3.	Prefinal Inspection	20
4.	Final Inspection	20
5.	Long-Term Operation and Maintenance	21
E. Task	5: Schedule and Reporting	21
1.	Progress Reports	21
2.	Construction Completion Report	22
3.	Schedule	22

APPENDIX C

Map of the Site



Appendix C
Map of the Site



APPENDIX D

The current site owner/operator is Winnebago Reclamation Service, Inc.

APPENDIX E

The Class A Settling Defendant is:

Winnebago Reclamation Service, Inc.

APPENDIX D

The current site owner/operator is Winnebago Reclamation Service, Inc.

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APPENDIX E

The Class A Settling Defendant is:

Winnebago Reclamation Service, Inc.

Appendix F
Deed Restriction Form

APPENDIX F

DEED RESTRICTION

Winnebago Reclamation Service, Inc., owner in fee simple of the real estate described below, hereby imposes restrictions on the described real estate ("Pagel's Pit Landfill Operable Unit No. 1"), located in Township 43 North, Winnebago County, State of Illinois, and more fully described in Attachment 1 to this Appendix.

Purpose

For the purpose of protecting human health and the environment and preventing interference with remedial action and maintenance work at the Pagel's Pit Facility, the following restrictions are imposed on the Pagel's Pit Landfill Operable Unit No. 1, its present and any future owners, and their authorized agents, assigns, employees or persons acting under their direction or control.

Terms

1. Except as required under the terms of the Consent Decree, no production wells shall be installed in or draw upon the upper aquifer underlying the Pagel's Pit Landfill Operable Unit No. 1. Water from the upper aquifer shall not be used as a drinking water source nor shall it be used in such a manner as to cause exposure to people or animals. If the present or future owners can demonstrate to the United States Environmental Protection Agency's ("U.S. EPA") satisfaction that the

groundwater in the upper aquifer underlying the Pagel's Pit Landfill Operable Unit No. 1 is not a threat to human health or the environment, this restriction may be lifted by petitioning U.S. EPA.

2. There shall be no residential use of the Pagel's Pit Landfill Operable Unit No. 1.

3. Any agricultural use of the Pagel's Pit Landfill Operable Unit No. 1 must be approved by U.S. EPA.

4. Any installation, removal or construction of any buildings, wells, pipes, roads, ditches or any other structures must be approved by U.S. EPA. U.S. EPA shall not approve any such action which will impair or defeat any remedial measures or the maintenance of remedial measures at the property.

5. Unless authorized by U.S. EPA, no one shall tamper with or remove any containment or monitoring systems or any components of the remedial action on the Pagel's Pit Landfill Operable Unit No. 1.

6. There shall be no interference with the performance of the work or remedial action, or with the maintenance of remedial measures approved by U.S. EPA and/or the United States District Court for the Northern District of Illinois.

All of the above restrictions shall run with the land and continue in perpetuity. None of these restrictions shall prohibit Winnebago Reclamation Service, Inc. or its successors or assigns from conducting landfilling and related operations under the terms of the present permits issued by the State of Illinois.

By: _____

STATE OF ILLINOIS

This instrument was acknowledged before me on _____
by _____ and _____
as the _____ and _____
of Winnebago Reclamation Service, Inc.

Notary Public

DEED RESTRICTION

Attachment 1: Legal Description

Part of the East Half (1/2) of Section Thirty-Six (36), Township Forty-Three (43) North, Range One (1) East of the Third (3rd) Principal Meridian and part of the West Half (1/2) of Section Thirty-One (31), Township Forty-Three (43) North, Range Two (2) East of the Third (3rd) Principal Meridian, bounded and described as follows: Beginning at the southwest corner of the East Half of the Northeast Quarter of Section 36, Township 43 North, Range 1 East of the 3rd Principal Meridian; thence North 00 degrees 58 minutes 29 seconds West, along the west line of the East Half of said Northeast Quarter, a distance of 731.70 feet; thence North 89 degrees 12 minutes 41 seconds East 1537.48 feet to the centerline of Lindenwood Road (County Highway 11A); thence southeasterly, along a non-tangent curve to the left having a center which lies 716.14 feet to the northeast, an arc distance of 111.37 feet (the chord across the previously described circular curve course bears South 47 degrees 50 minutes 59 seconds East 111.26 feet); thence South 52 degrees 18 minutes 16 seconds East, along said centerline, 383.27 feet; thence southeasterly, along said centerline and along a tangential curve to the right having a center which lies 955.00 feet to the southwest, an arc distance of 856.45 feet (the chord across the previously described circular curve course bears South 26 degrees 36 minutes 46 seconds East 828.04 feet); thence South 00 degrees

55 minutes 16 seconds East, along said centerline, 83.52 feet;
thence South 69 degrees 32 minutes 02 seconds West 1401.38 feet;
thence South 00 degrees 00 minutes 00 seconds East 305.00 feet;
thence South 90 degrees 00 minutes 00 seconds West 950.00 feet to
the west line of the East Half of the Southeast Quarter of
Section 36, Township 43 North, Range 1 East of the 3rd Principal
Meridian; thence North 00 degrees 58 minutes 29 seconds West,
along said line, 660.26 feet; thence North 33 degrees 19 minutes
47 seconds West 607.28 feet to the North line of the Southeast
Quarter of said Section 36; thence North 88 degrees 40 minutes 20
seconds East, along said line, 325.00 feet to the point of
beginning. Situated in the County of Winnebago and State of
Illinois and containing 79.828 acres.

APPENDIX G

Class B Settling Defendants

Class A and Class B Settling Defendants'
Payments for Past Response Costs

Class B Settling Defendants'
Payments to the Pagel's Pit Landfill Trust Fund

APPENDIX G

PRP	PAST COST PAYMENT	TRUST FUND PAYMENT	RI/FS CREDIT
CLASS B			
Acme Resin Corporation	\$17,500	\$17,500	\$14,000
Barber-Colman Company	\$7,500	\$7,500	0
Browning-Ferris Industries of Illinois, Inc.	\$17,500	\$17,500	\$14,000
Commercial Wire & Display Products Corp*	\$10,000	\$10,000	0
Chrysler Corporation	\$17,500	\$17,500	\$14,000
Dean Foods, Inc.	\$17,500	\$17,500	\$14,000
Ex-Cell-O/Textron	\$17,500	\$17,500	\$14,000
Goodyear/Kelly/Springfield Tire Co	\$21,500	\$21,500	\$6,000
Hydro-Line Manufacturing Company	\$7,500	\$7,500	0
Joseph Behr & Sons, Inc.	\$6,000	\$6,000	\$3,000
Kaney Transportation, Inc.	\$17,500	\$17,500	\$14,000
Kelsey, Hayes/Gunite Corporation	\$19,000	\$19,000	\$11,000
Laidlaw Waste Systems	\$17,500	\$17,500	\$14,000
Metalcrafters/Keystone Consolidated Ind	\$17,500	\$17,500	\$14,000
Quality Metal Finishing Co	\$17,500	\$17,500	\$14,000
Rockford Clutch/Borg Warner	\$500	\$500	\$14,000
Rockford Products Corp	\$17,500	\$17,500	\$14,000
The Testor Corporation	\$7,500	\$7,500	0
CLASS A			
Winnebago Reclamation	\$237,500		
	\$492,000	\$254,500	\$174,000

* Includes additional \$5,000 reflecting participation after January 1992.

APPENDIX H
Trust Fund Agreement

PAGEL'S PIT LANDFILL REMEDIATION TRUST FUND

TRUST AGREEMENT

Trust Fund Number _____

Trust Agreement, the "Agreement", entered into as of the _____ day of _____, _____, by and between Winnebago Reclamation Service, Inc., a corporation, the "Grantor", and _____, the "Trustee".

Whereas, the Grantor and certain other parties have entered a Consent Decree, the "Consent Decree", with the United States Environmental Protection Agency, "USEPA", pursuant to which they have agreed to perform certain remedial design and remedial action and operation and maintenance activities at the Pagel's Pit Landfill Site, the "Site", and the Grantor has agreed to provide financial assurance of their ability to do so.

Whereas, many parts of the remedial design and remedial action and operation and maintenance activities which the Grantor is obligated to perform under the Consent Decree are the same activities which the Grantor is obligated to perform in the closure and postclosure care of the Site.

Whereas, the Grantor has elected to utilize this trust to provide part of the financial assurance required under the Consent Decree.

Whereas, Section 21.1 of the Illinois Environmental Protection Act, the "Act", prohibits any person from conducting any waste disposal operation unless such person has posted with the Illinois Environmental Protection Agency, "IEPA", a performance bond or other security for the purpose of insuring closure of the site and postclosure care in accordance with the Act and Illinois Pollution Control Board, "IPCB", rules.

Whereas, the IPCB has established certain regulations applicable to the Grantor, requiring that an operator of a waste disposal site provide assurance that funds will be available when needed for closure and/or postclosure care of the site.

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the site identified in this agreement.

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this

agreement, and the Trustee is willing to act as trustee.

Whereas, Trustee is an entity which has authority to act as a trustee and whose trust operations are registered by the Illinois Commissioner of Banks & Trust Companies or who complies with the Corporate Fiduciary Act (Ill. Rev. Stat. 1989, ch. 17, par. 1551-1 et seq.)

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

- a) The term "Grantor" means the operator who enters into this Agreement and any successors or assigns of the operator.
- b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of the Site and Cost Estimates. This Agreement pertains to the Pagel's Pit Landfill Site for which USEPA has currently (June 1992) estimated the cost for completing the Work under the Consent Decree to be \$6.2 million.

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund", for the benefit of IEPA and USEPA. The Grantor and the Trustee intend that no other third party have access to the Fund except as provided in this agreement. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, such property consisting exclusively of United States currency. Such Property and any other property subsequently transferred to the Trustee by the Grantor or any other parties is referred to as the Fund, together with all earnings and profits on the Fund, less any payments or distributions made by the Trustee pursuant to this agreement. The Fund shall be held by the Trustee, in trust, as provided by this agreement. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor.

Section 4. Payments From the Fund.

- a) **Payments for Response Costs.** The Trustee shall distribute such amounts from the Fund to the USEPA as USEPA directs, in writing, are payable for Future Response Costs (as defined in the Consent Decree) in accordance with the terms of the Consent Decree. Each direction shall state that all of the requirements of the Consent Decree relating to that payment have been met and that the amount in question is due under the terms of the Consent Decree.

b) The Trustee shall make payments from the Fund as the USEPA shall direct, in writing, to provide for the payment of the costs of the remedial design or remedial action, the "RD/RA Costs", or of operation and maintenance, the "O&M Costs", required to be performed under the Consent Decree. Additionally, with the written approval of the USEPA, the Trustee shall make payments from the Fund as IEPA shall direct, in writing, to provide for the costs of closure and/or postclosure care of the Site. The Trustee shall reimburse the Grantor or other persons as specified by the USEPA from the Fund for RD/RA Costs or O&M Costs in such amounts as the USEPA shall direct in writing. Additionally, with the written approval of USEPA, the Trustee shall reimburse the Grantor and such other persons as specified by IEPA from the Fund for closure and postclosure expenditures in such amounts as the IEPA shall direct in writing. In addition, with the prior written approval of USEPA, the Trustee shall pay to the City of Rockford, Illinois, a municipal corporation, the "City", and the Rock River Water Reclamation District, a municipal corporation, the "District", such amounts as USEPA specifies in writing. Upon such payment, such funds shall no longer constitute part of the Fund.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trust Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

- a) Securities or other obligations of the Grantor, or any other owner or operator of the site, or any of their affiliates as defined in Section 80a-2(a) of the Investment Company Act of 1940, as amended (15 U.S.C. 80a-2(a)), shall not be acquired or held, unless they are securities or other obligations of the Federal government or the State of Illinois;
- b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by the Federal Deposit Insurance Corporation; and

- c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

- a) To transfer from time to time any or all of the assets of the Fund to any common, commingled or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and
- b) To purchase shares in any investment company registered under the Investment Company Act of 1940 (15 U.S.C. 80a-1 et seq.) including one which may be created, managed, underwritten or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this agreement or by law, the Trustee is expressly authorized and empowered:

- a) To sell, exchange, convey, transfer or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or experience of any such sale or other disposition;
- b) To make, execute, acknowledge and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers granted in this agreement;
- c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve Bank, but

the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

- d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by the Federal Deposit Insurance Corporation; and
- e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee, to the extent not paid directly by the Grantor, and all other proper charges and distributions of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually furnish to the Grantor, the USEPA, and the IEPA a statement confirming the value of the Fund. The evaluation day shall be each year on the thirty-first (31) day of December. Any securities in the Fund shall be valued at market value as of the evaluation day. The Trustee shall mail the evaluation statement to the Grantor, the USEPA, and the IEPA within 30 days after the evaluation day. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and the successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor Trustee's acceptance of the appointment, the

Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in writing sent to the Grantor, USEPA, IEPA and the present Trustee by certified mail ten days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests and instructions. All orders, requests and instructions by the USEPA or the IEPA to the Trustee shall be in writing, signed by the Director of the Waste Management Division, USEPA, Region V, or his designees or by the IEPA Director or his designees (as the case may be), and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor, USEPA or IEPA hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests and instructions from the Grantor, USEPA, and/or IEPA, except as provided in this agreement.

Section 15. Payments and Notice of Nonpayment.

a) Upon the execution of this Agreement, the Grantor has paid \$_____ and the Class B Settling Defendants, defined in the Consent Decree, have collectively paid \$_____ to the Trustee to be administered by the Trustee in accordance with the terms of this Agreement. Until such time as USEPA's then current estimate of the total cost of completing the work under the Consent Decree is less than the total amount of the letters of credit being maintained plus the amount then in the Fund, on or before the date of each anniversary of the entry of the Consent Decree, the Grantor shall make the additional payment required under the Consent Decree.

b) The Trustee shall notify the Grantor, USEPA and IEPA, by certified mail within ten days following the expiration of the 30-day period after the anniversary of the entry of the Consent

Decree, of the amount of each payment received during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, Director of the Waste Management Division, USEPA, Region V, and the IEPA Director, or by the Trustee, the Director of the Waste Management Division, USEPA, Region V, and the IEPA Director if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Fund shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, the Director of the Waste Management Division, USEPA, Region V, and the IEPA Director, or by the Trustee, the Director of the Waste Management Division, USEPA, Region V, and the IEPA Director, if the Grantor ceases to exist. Upon termination of the Fund, all remaining trust property, less final trust administration expenses, shall be delivered to the City and the District in equal shares.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Fund, or in carrying out any directions by the Grantor, the Director of the Waste Management Division, USEPA, Region V, or the IEPA Director issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed and enforced according to the laws of the State of Illinois.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written.

Attest: Signature of Grantor_____

Typed Name_____

Title_____

Attest: Signature of Trustee_____

Typed Name_____

Title_____

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) SS

On this _____ day of _____, _____ before me personally came _____ (operator) to me known, who, being by me duly sworn, did depose and say that she/he resides at _____ (address), that she/he is _____ (title) of _____ (corporation), the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of directors of said corporation, and that she/he signed her/his name thereto by like order.

_____. Notary Public

My commission Expires_____

EXHIBIT A

Person(s) designated to sign orders, requests, and instructions
by the Grantor to the Trustee:

John Holmstrom III of Winnebago Reclamation Service, Inc.